Attachment 1

CIBC World Markets, *Opportunities for Flat-rate Pricing and Bundling, Industry Update: Telecommunications Services,* June 26, 2003

CIBC

CIBC WORLD MARKETS

Equity Research

June 26, 2003

Industry Update Sector Weighting: *Market Weight*

Opportunities for Flat Rate Pricing and Bundling

Telecommunications Services

- The advent of flat rate pricing and bundled services represents a major opportunity for low cost local exchange carriers to take market share and grow their revenue per household. 100 years' worth of communications history has shown that consumers prefer set rates and pricing simplicity.
- Bundles increase the overall revenue pie, despite offering discounts to "a la carte" prices, as consumers buy more services. The winners will be those that expand into new markets, gain incremental profitable revenue, and offer consumers a package of differentiated and "sticky" products.
- The RBOCs are best poised to sell flat rate packages of communications and entertainment services, because of their low cost and unique ability to bundle local, LD, DSL, wireless, & video. Cable companies are also well positioned, but lack a wireless strategy and have historical service issues.
- We analyze why we believe that the migration towards flat rate bundling is inevitable, as well as detail the RBOCs' unique advantages in selling bundles, and the impact of flat rate pricing plans on the profitability of the overall consumer market and its participants.

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Bundling Positive for RBOCs

We detail in this report:

1) Why the trend towards flat rate bundling is inevitable;
2) Why the RBOCs are best positioned for bundling;
2) Analysis of consumer communications market share;
3) Analysis of profitability; and
4) Risks.

Our conclusions: we believe that long-distance and Internet access will become integrated with local-exchange services, and that longer-term it will be difficult to differentiate. Wireless will also become integrated, but more slowly. Video will also be assimilated, but initially, we expect the RBOCs to resell satellite services and migrate to video over fiber.

According to our analysis, flat rate pricing and bundling represent significant drivers of secular improvement for the Regional Bell Operating Companies (RBOCs) and local exchange companies. Bundling and flat rate pricing is counterintuitive at first, because most other industries are utilizing information technology to increase price discrimination (although in the case of airlines this may be reversing). However, consumers have always shown themselves to be risk averse, preferring simplicity and set prices.

While the recent history of flat rate plans in local exchange is limited, the history of flat rate services in communications has generally been positive, both strategically and financially, for the companies with the scale, capacity and balance sheets to take advantage of the overwhelming customer demand for flat rate bundled products. On the local exchange side, despite only a few months of marketing, bundles have slowed RBOCs' access line losses and boosted revenue per user and profitability.

We are not surprised by these results. For over a hundred years, flat rate pricing of communications has invariably led to an explosion in usage and subscriber growth. Dr. Andrew Odlyzko, working at AT&T Labs in 1991, wrote what we believe is an excellent report, *Internet Pricing and the History of Communications*, which cites several examples of this. Investors have always been concerned about flat rate pricing of communication services:

--Mail was charged by distance in the 1800s.
--Local exchange flat rate pricing was thought unfair at the turn of the 20th century.
--Email was charged by usage in the 1980s.
--Flat rate pricing in 1996 for Internet Access was thought to have the potential to bring down the Internet.
--U.S. wireless data carriers moved to flat rate pricing almost immediately.

Flat rate pricing for all these services were always very reluctantly entered into by the companies, and were almost always the result of competition. As Mark Twain once said, "History does not always repeat itself, but it often rhymes."

The potential financial windfall from bundling is significant. We estimate that the average U.S. household spends $135 per month on a full suite of voice/data/video services, up from $120 per month in 2000 (Exhibit 1). We believe that this will grow to $149 by 2006, a 4% compounded average growth rate, translating into a

Exhibit 1. Analysis of Consumer Video and Communications Market

2000
Consumer Video and Communications Market
Total # of US Households 106

	Spend Per Household	% of HH	Total U.S. Annual Spend	% of Market
Local	$36	120%	$54,950	36.1%
LD	18	120%	$27,475	18.1%
Cable	38	62%	$29,968	19.7%
Satellite	45	14%	$8,014	5.3%
Wireless	45	35%	$20,034	13.2%
Dial-Up ISP	20	40%	$10,176	6.7%
Broadband ISP	40	3%	$1,526	1.0%
Total			$152,144	
Revenue Per Household Per Month			$119.61	

2000
Consumer Video and Communications Market
Facilities Based Market Share Estimates

	Telcos %	Telcos Amount	Cable %	Cable Amount	Wireless %	Wireless Amount	T %	T Amount	WCOM %	WCOM Amount	ISPs %	ISPs Amount	Other %	Other Amount
Local	95%	$52,203	1%	$275	1%	$550	2%	$1,099	1%	$550	0%	$0	1%	$275
LD	5%	$1,374	0%	$82	10%	$2,748	55%	$15,111	25%	$6,869	0%	$0	5%	$1,291
Cable	1%	$300	97%	$29,069	0%	$0	0%	$0	0%	$0	0%	$0	2%	$599
Satellite	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	100%	$8,014
Wireless	55%	$11,019	0%	$0	40%	$8,014	0%	$0	3%	$601	0%	$0	2%	$401
Dial-Up ISP	10%	$1,018	0%	$0	2%	$204	5%	$509	2%	$204	80%	$8,141	1%	$102
Broadband ISP	20%	$305	80%	$1,221	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0
Total		$66,218		$30,648		$11,514		$16,719		$8,223		$8,141		$10,681
Total Share		43.5%		20.1%		7.6%		11.0%		5.4%		5.4%		7.0%
ARPU		$52.06		$24.09										

2003
Total # of US Households 110

	Spend Per Household	% of HH	Total U.S. Annual Spend	% of Market
Local	$38	115%	$57,684	32.3%
LD	13	115%	$19,734	11.1%
cable	49	60%	$38,808	21.7%
satellite	45	20%	$11,880	6.7%
wireless	45	50%	$29,700	16.6%
dial-up	18	45%	$10,692	6.0%
broadband	38	20%	$10,032	5.6%
Total			$178,530	
Revenue Per Household Per Month			$135.25	

2003
Consumer Video and Communications Market
Facilities Based Market Share Estimates

	Telcos %	Telcos Amount	Cable %	Cable Amount	Wireless %	Wireless Amount	T %	T Amount	WCOM %	WCOM Amount	ISPs %	ISPs Amount	Other %	Other Amount
Local	84%	$48,455	3%	$1,442	1%	$577	3%	$1,731	2%	$1,154	0%	$0	8%	$4,326
LD	15%	$2,960	4%	$789	18%	$3,552	35%	$6,907	17%	$3,355	0%	$0	11%	$2,171
Cable	2%	$582	96%	$37,256	0%	$0	0%	$0	0%	$0	0%	$0	3%	$970
Satellite	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	100%	$11,880
Wireless	46%	$13,662	0%	$0	51%	$15,147	0%	$0	0%	$0	0%	$0	3%	$891
Dial-Up ISP	10%	$1,069	0%	$0	2%	$214	5%	$535	2%	$214	80%	$8,554	1%	$107
Broadband ISP	28%	$2,809	70%	$7,022	0%	$0	0%	$0	0%	$0	0%	$0	2%	$201
Total		$69,537		$46,510		$19,490		$9,172		$4,722		$8,554		$20,546
Total Share		38.9%		26.1%		10.9%		5.1%		2.6%		4.8%		11.5%
ARPU		$52.68		$35.23										
ARPU Per Sub				$58.72										

2006
Total # of US Households 113

	Spend Per Household	% of HH	Total U.S. Annual Spend	% of Market
Local	$37	115%	$57,698	28.6%
LD	13	115%	$20,272	10.1%
cable	58	58%	$45,616	22.6%
satellite	50	25%	$16,950	8.4%
wireless	45	60%	$36,612	18.2%
dial-up	18	30%	$7,322	3.6%
broadband	34	37%	$17,058	8.5%
Total			$201,529	100.0%
Revenue Per Household Per Month			$148.62	

2006
Consumer Video and Communications Market
Facilities Based Market Share Estimates

	Telcos %	Telcos Amount	Cable %	Cable Amount	Wireless %	Wireless Amount	T %	T Amount	WCOM %	WCOM Amount	ISPs %	ISPs Amount	Other %	Other Amount
Local	78%	$45,004	5%	$2,885	3%	$1,731	5%	$2,885	4%	$2,019	1%	$577	4%	$2,596
LD	35%	$7,095	5%	$1,014	23%	$4,663	20%	$4,054	9%	$1,824	0%	$0	8%	$1,622
Cable	3%	$1,368	96%	$43,791	0%	$0	0%	$0	0%	$0	0%	$0	1%	$456
Satellite	8%	$1,356	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	92%	$15,594
Wireless	42%	$15,377	0%	$0	51%	$18,672	0%	$0	0%	$0	0%	$0	7%	$2,563
Dial-Up ISP	10%	$732	0%	$0	2%	$146	5%	$366	2%	$146	80%	$5,858	1%	$73
Broadband ISP	36%	$6,141	60%	$10,235	0%	$0	0%	$0	0%	$0	0%	$0	3%	$512
Total		$77,074		$57,925		$25,212		$7,305		$3,990		$6,435		$23,416
Total Share		38.2%		28.7%		12.5%		3.6%		2.0%		3.2%		11.6%
ARPU		$56.84		$42.72										
ARPU Per Sub				$73.65										
2003-06 ARPU Growth		2.6%		6.6%										

Total Revenue CAGR from 2003-06	4.80%
Average revenue per house, CAGR	3.69%

Estimated 2003
Total U.S. Communications and Video Market
Includes Business and Residential

	2003	CAGR	2006
Total Telecom Market	$283,500	0.64%	$289,000
Satellite and Cable	$50,688	7.27%	$62,566
Total Market	$334,188		$351,566
Consumer Segment	$178,530	4.12%	$201,529
Business Segment	$155,658	-1.22%	$150,037

Source: CIBC World Markets Corp.

$200 billion total consumer market. Currently, the RBOCs are only capturing $42 in average monthly revenue per household, and we believe this could increase by 10% over the next 3 years as they gain market share in LD, broadband Internet access, and video. These gains will be facilitated through bundling—only 20% of households have some form of a communications bundle now (including cable modem), and we expect a majority of households to be purchasing bundled services within the next five years. We believe that the market has yet to recognize the full opportunity for the RBOCs, as their consumer sub valuations remain less than a third of cable subs', despite similar ARPUs and converging future revenue opportunities.

The RBOCs only trade at approximately $1,100 per consumer access line (approximately $1,600 per household if wireless is included), or less than 11X free cash flow (Exhibit 2), but the net present value of a high-end, fully-bundled customer is over $4,000 (Exhibit 6), and cable MSOs are valued on average at $3,600 per subscriber. The gap between cable and RBOC sub valuations represent the unrecognized "call option" on the future consumer market for the RBOCs, since longer-term, both RBOCs and cable companies will look very similar to one another in terms of product portfolio, customers, and total consumer revenue opportunity.

This is especially true considering the eventual upgrade of the RBOCs' networks to fiber. Admittedly, the cable company is expected to generate more revenue per household and more free cash flow, but only approximately 125% of the RBOC's, not the 300% that the current differences in valuation suggest. In addition, during this time frame, the RBOCs should continue to generate substantial amounts of free cash flow.

We calculate that on a wireline basis, the RBOCs generate approximately $100 per year of free cash flow on each residential access line (Exhibit 2). This does not include associated wireless revenue. We also believe that the RBOCs can take the next twenty years and upgrade the copper networks to fiber in a cost effective way. This assumes that they will effectively resell satellite TV as a way to build a scalable customer base.

The strength and sustainability of these free cash flows is illustrated by BellSouth's 21% increase of its dividend over the past 5 quarters. Despite these positive signals, the RBOCs now trade at historically high relative dividend and free cash flow yields (Exhibit 3).

Exhibit 2. Current Average Valuation Analysis for Consumer Subscribers

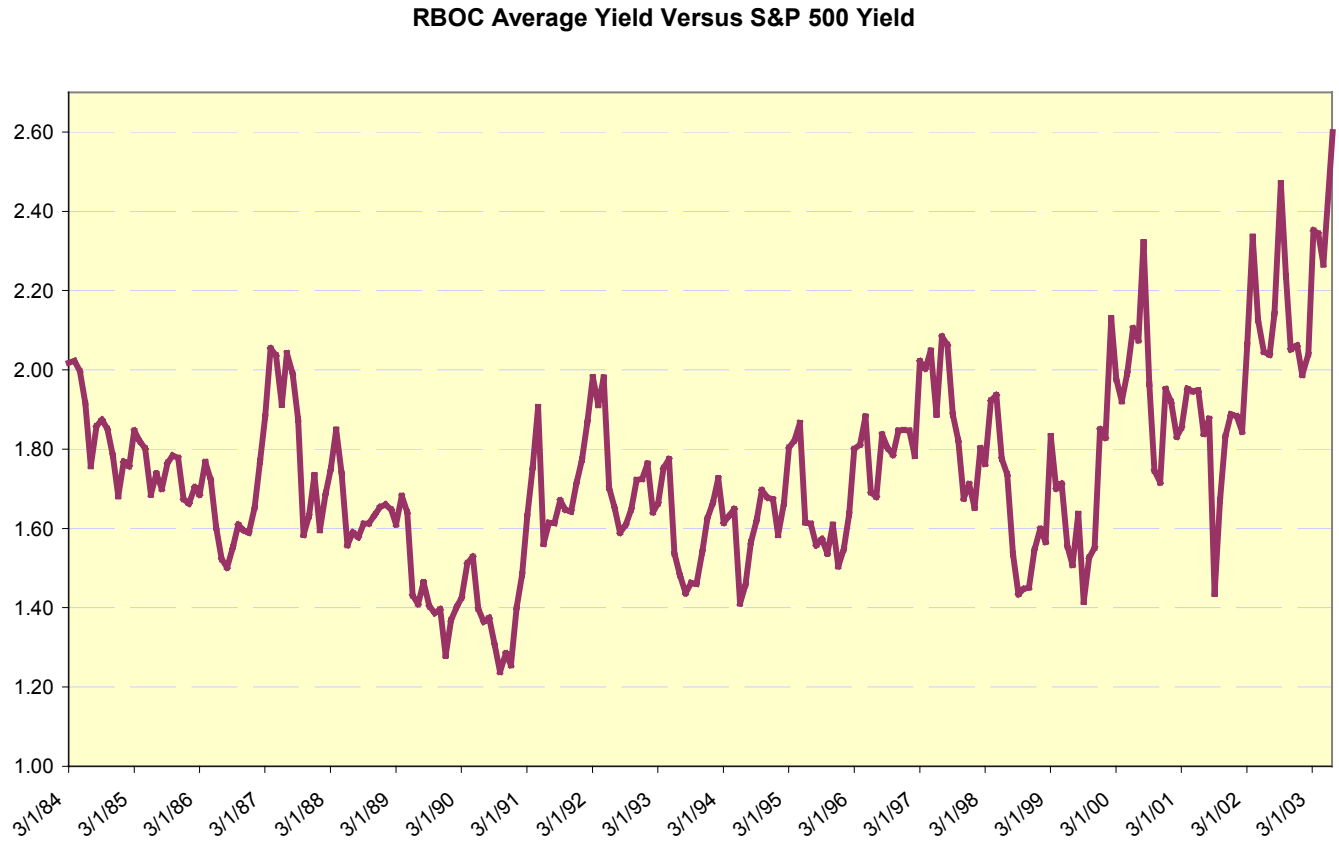
2003

	Estimated Valuation	Monthly Revenue	EBITDA Margin	Annual EBITDA	Annual CAPX	Operating Free Cash Flow	Subscriber Growth	ARPU Growth	EBITDA Multiple	FCF Multiple
RBOC	$1,100	$42	40%	$202	$100	$102	-2%	3%	5.5x	10.8x
Cable	3600	59	36%	255	$210	$45	0%	7%	14.1x	80.2x
Rural	3200	60	55%	396	$125	$271	0%	2%	8.1x	11.8x
Wireless	1500	45	30%	162	$130	$32	5%	1%	9.3x	46.9x

Note:
RBOC valuation is for wireline only.

Source: CIBC World Markets Corp.

Exhibit 3. RBOC Average Yield as a Percentage of the S&P 500's Yield is at a Historical High



Source: CIBC World Markets Corp. & StockVal.

Note: RBOC average includes BLS, SBC, and VZ.

In addition to their relatively inexpensive valuation, the RBOCs have limited debt, benefit from an improving regulatory environment, and as we shall discuss in this report, reasonable opportunity to grow revenue in 2004 and beyond. Our expectations for the RBOCs are for 2% long-term revenue and 6% EPS growth. We believe that the stocks could trade up to market multiples as investors realize this, up from their current 20% discount. Lastly, the ability to upgrade to fiber-to-the-home is a valuable call option on the consumer market that is difficult to quantify.

For these reasons, we believe the biggest beneficiaries of bundling will be the RBOCs, and we reiterate our Sector Outperformer ratings on BellSouth, SBC, and Verizon. Positive momentum for these companies, however, could conversely be negative for their competitors that have been gaining local-exchange market share, namely long-distance carriers, Internet service providers, independent wireless companies, and to a lesser degree, the cable companies, which remain the RBOCs' most significant long-term competitors.

Bundles Grow the Pie

Bundling services into a flat rate basis is incorrectly perceived as deflationary, because packages are usually priced at 30% discounts to *a la carte* services. Obviously, the concern with these discounts is that the overall revenue pie will shrink and hurt profitability. However, history and current financial performance does not support this pessimism. The reason this is misplaced is that unit costs for transport are declining at over 30% per year, and by giving customers more transport for the same amount of money, service providers continue to generate solid returns on invested capital. Furthermore, billing, customer care and churn substantially decline. These costs can easily represent 25% or more of revenue. In addition, flat rate pricing clearly puts the RBOCs in a competitive advantage versus their peers.

In the 1970s, Bell Labs conducted research that found an overwhelming customer preference for flat rate pricing at that time, even though over 60% of the users would have been better off with a usage sensitive tariff. In essence, we expect demand elasticity to enable overall household spend to continue to grow, and for the RBOCs to grow as fast as the overall market. At the same time, we believe that the RBOCs' profitability can remain fairly stable. In addition, there is solid academic evidence that mixed bundling, or selling both bundles and *a la carte* services, almost always generates more revenues and profitability than selling just separately or just in bundles. This is because mixed bundling:

1. lowers transaction costs
2. lowers operating costs
3. lowers marketing costs
4. and allows a more predictable revenue stream, which is valuable.

Historical Precedents are Positive

We note that there was intense skepticism surrounding AOL's flat rate Internet Access package in 1996 and around AT&T Wireless's Digital One Rate plan. Both plans ended up exceeding the most optimistic expectations and demonstrate the benefits of subscription pricing.

As we saw in the wireless long-distance market, the migration from per minute usage to the bundling of long-distance as an indiscernible component of the wireless offering, occurred in one year, during 1998 when AT&T began its Digital One Rate plan. This occurred due to the massive migration to digital coverage and because the RBOCs were allowed to enter the long-distance wireless market in mid 1996. As a result, of this, the RBOCs went from 0% long-distance market share in mid 1996 to over 80% of their customers utilizing them for long-distance in less than 18-months. This makes intuitive sense, from both a carrier and customer's perspective. For a carrier, the cost for an LD call is the same as a local call (unless you try billing it and serving it as a per minute charge), and from a customer's perspective, why bother dealing with more than one provider for wireless services? Both of these self-evident truths also hold for wireline services.

Interestingly, both AT&T Wireless and AOL reported a sharp acceleration in revenue from flat rate pricing. Top-line results were driven by both increased subscriber growth and rising average revenue per subscriber. Profitability also

grew above expectations over time, due to scale and Moore's law driving down the cost of transport almost 40% per year.

Despite concerns that Digital One Rate would hurt AT&T's profitability, in the long run, it actually caused average revenue per user (ARPU) to rise, while margins improved with the reduction in roaming costs, even with faster subscriber growth, because usage picked up. We believe a look at the company's 800MHz unit presents a clean picture of what really happened:

On the 800MHz cellular side: 4Q97 ARPU was $57, ARPU bottomed in 1Q98 at $53 (down 10% YOY), then ARPU rose sequentially through the remainder of 1998 and ended 1998 down about 5%. 1999 ARPU rose 14% to $61.90, again due to usage. ARPU in 2000 rose 4% again, and has fallen since. Meanwhile, 800MHz EBITDA margins in 1997 and 1998 were flat at 29%, but fell to 24% in 1999 (this is clouded due to 30% more net adds, several dilutive acquisitions and high roaming charges). Margins are now back up to 28%.

Exhibit 4. AT&T Wireless 800MHz Results

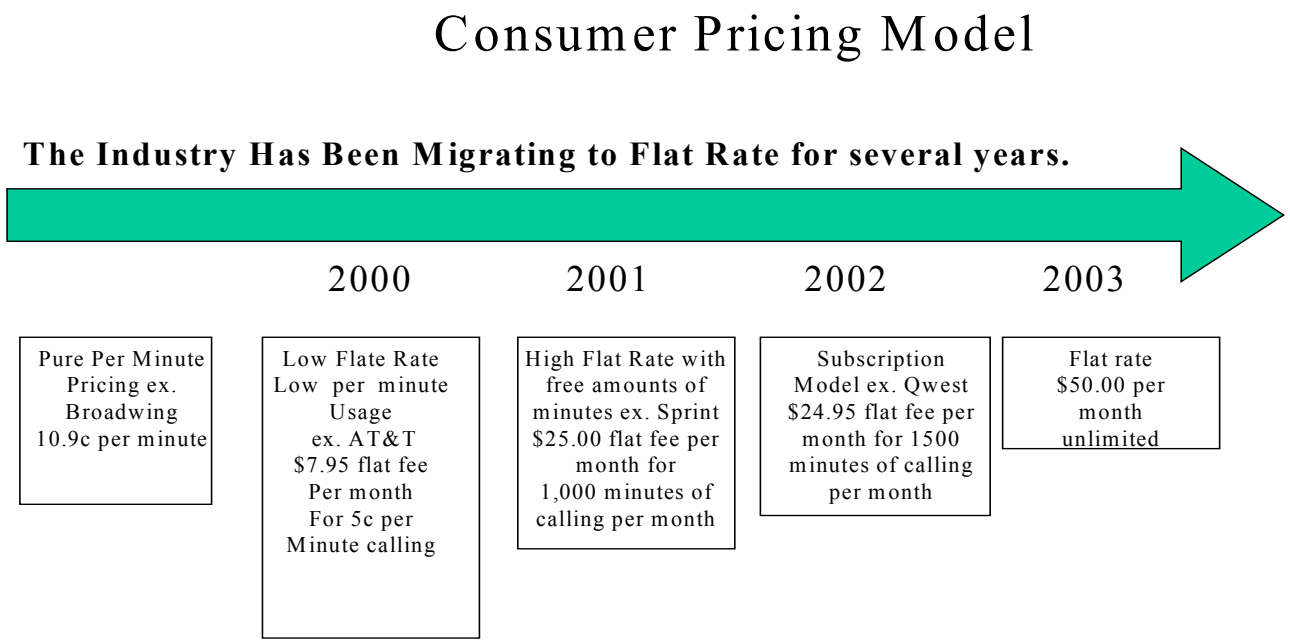
Units in Millions

	1997	1998	1999
Revenue	3,990	4,240	5,590
EBITDA	1,180	1,260	1,360
EBITDA Margins	30%	30%	24%
Net Adds	NA	1.23	1.67

Source: CIBC World Markets Corp.

A similar event occurred in 1997 for Internet access. Prior to flat rate plans, the vast majority of customers paid for Internet access on an hourly usage basis priced at approximately $5 per hour. AOL was not the first company to offer the subscription based $19.95 model. AOL went reluctantly toward this transition, and this strategy initially hurt its stock price, but because the market was so nascent and growing so rapidly, AOL was able to constantly improve its content, while lowering its costs—similar to what we expect a local-exchange company to be able to do (broadband access being a direct corollary). Thus, the subscription plan was a huge home run for AOL. In a November 1997, conference call, AOL noted that "its retention rate improved as the quarter progressed, reaching its best levels in September since mid-1995…and [it] also saw strong subscriber growth following the September launch of its new marketing campaigns…having added approximately 400,000 net new subscribers in the first quarter, [it]gained nearly 275,000 in October alone…at the same time, average hourly usage improved to 6.95 hours per member in the recent period and, in October, hit its highest level in the [company's] history." Incidentally, AOL was partly able to lower transmission costs substantially by outsourcing virtually its entire network—a model that we think is inevitable for communications services.

Exhibit 5. Consumer Pricing Model



Source: CIBC World Markets Corp.

Why is This Process Inevitable?

The trend and natural migration toward a subscription-based model is clearly present in the communications services industry. Prior to Sprint's $0.15 per minute plan in 1995, consumers paid for long-distance based on time of day and distance. After Sprint introduced its plan, volumes exploded, with per minute pricing quickly declining to $0.10 per minute. Once again, within a two-year period this model had become obsolete. Recent telephone offerings from the large carriers also illustrate this trend, as flat rate charges have increased while at the same time, per minute prices have declined (Exhibit 5).

To us, it is not a question of *whether* this process will happen, but *how quickly* it will happen. Technological change is both slashing transport costs and creating intermodal competition, which in turn is forcing the incumbent providers to realign their business models on a customer basis. Consumers want easier to use services at lower unit prices. In communications that always translates into predictable, flat rate services, with close to unlimited usage. Aligned with this is the fact that the incumbents can create unique bundles of services. The way to gain market share on a per household basis is to create unique/differentiated services/applications at the lowest price.

This clear and obvious movement in the consumer communications market is just one aspect of the industry-wide shift to both network-centric computing (from telecom to datacom), and the migration to a horizontally segmented structure.

Top Ten Accelerators of This Migration

Customers Are Demanding It

1) Consumers prefer subscription models (electric utilities, magazines, ISPs and wireless). Time and time again, most consumers chose simplicity and predictability when given a choice. AT&T knows this, and they have driven simplified per minute pricing in long-distance, ISP and eventually wireless. Clearly, the wireless Digital One Rate plan was an industry-defining event whose outcome surprised most observers. In the ISP market, companies often found that am $11-$15 subscriber would jump at a $20 per month plan; while usage increased, so did profitability.

2) The migration is inevitable based upon similar evolutions in local-exchange, long-distance and ISP.

3) The current difference between local and long-distance is really more regulatory driven than an actual structural issue. The regulatory barriers likely will be entirely removed by the end of this year.

4) MCI's Neighborhood plan started flat rate bundling of local with long-distance and customer demand was strong. This should not be surprising, given the 80-years that local has been flat rate, and the almost ten years that toll (intrastate/intraLATA long-distance calls) have been bundled with local exchange.

5) As shown in the wireless market, customers do not want the hassles of dealing with two separate carriers. Also shown in the wireless market, whoever the underlying local carrier is will probably pick-up the long-distance service. All you have to do is look at the success of independent phone carriers, who do not have a lot of incentive to pick up long-distance market share, and yet they have gained over 30% generally over three years.

A Competitive Market Forces Suppliers to Align Prices With Costs

6) It is the dominant strategy for the RBOCS to combine broadband and long-distance with local, using their low cost position. The RBOCs have been losing market share to UNE-P resale and cable modems over the last two years. The net present value of retaining access lines and these customers is by far the largest value-creating investment that the RBOCs can make.

7) Voice over the Internet. It is probably only 5% of voice minutes currently, but quality is virtually indiscernible from circuit switched and we expect differentiated services to help this growth rate. There are several companies that are working to enable a massive migration from circuit switched networks to packet switched. ITXC is enabling this over the public Internet, and Level 3 has built its whole network around IP. Eventually, the cable companies will deploy VOIP. The RBOCs' flat rate pricing is a way to minimize market share losses.

8) Access charges are coming down substantially over the last four years less than $0.006/minute versus $0.03 in 1999. The decline in per minute access has been offset by an increase in subscriber line charges.

9) Churn is the bane of the industry and boosts costs. It represents 25% of the cost of wireless companies. Bundling reduces churn.

10) Current business models are misaligned with the fact that the marginal cost of transport is plummeting in a packet switched world. Oftentimes, it costs more to bill customers than it does to provision their service at this point.

RBOCs Best Positioned for Bundling

In our opinion, it will be much easier for companies with dominant local franchises to bundle and create differentiated products, than it will be for other companies from other segments of the consumer market. Ultimately, we expect the RBOCs and the cable companies to both offer full service bundles, dominating a relatively stable consumer market, while competing with several niche-product focused companies.

We believe that the RBOCs have a competitive advantage with their ability to offer unique bundles in a cost-effective manner. Other competitors have difficulty offering a similar bundle of tightly integrated local, LD, DSL, wireless and video (we expect the RBOCs to introduce a more integrated satellite service soon). Furthermore, the RBOCs can also bundle second lines very inexpensively; they have the spare capacity, and can buy additional transport for voice and data inexpensively. Meanwhile:

1. The long-distance companies only have the ability to sell local-exchange services in a cost effective way to half the country, and we expect this to shrink over the next five years. More importantly, the long-distance carriers have limited abilities to bundle broadband, wireless and second phone lines, let alone create unique applications.
2. Internet Service Providers, particularly AOL, will lose their dial-up subscriber revenues as customers migrate to broadband. We believe that EarthLink and United Online have different customer segments that protect them somewhat.
3. The wireless companies only have one component of the bundle, with very limited capabilities to add other pieces, and we expect them to remain niche players in the overall consumer market.
4. Cable companies are clearly the greatest threat to the RBOCs, and have gained a majority of broadband market share and have been successful in the voice market in areas they have entered. However, we do not expect the cable companies to go after many new voice markets in the next two years, partially due to regulatory, balance sheet, and technology issues. Their ability to bundle in wireless is limited.
5. Voice over IP (VOIP) has attracted a lot of attention lately, and we believe that bundling significantly mitigates the threat to the RBOCs. This is because the price of a $39 unlimited VOIP plan, which requires a broadband connection, is essentially comparable to an RBOC's all-you-can-eat-plan, once broadband, wireless and ultimately video is packaged in the bundle. In addition, if local connectivity costs are excluded, VOIP really is not that much cheaper to operate than switched services; VOIP will really take off when new unique applications are created.

We believe that even if the RBOCs' competitors can assemble a comparable bundle, their costs would be substantially higher, and the strength of the balance sheets may limit the competitive response.

Local exchange companies have a lower cost structure and better customer relationships that most of their competitors. The bulk of the cost in communications is for customer acquisition, care and billing, and the RBOCs have a clear advantage here since they already incur these costs for local service and the incremental costs to add new services is *de minimus*. Ongoing costs of providing new services, such as long-distance, are also low, and the RBOCs can buy wholesale LD minutes for less than a half a cent per minute.

On the broadband side the upfront capital and customer acquisition costs are in the $500 range per subscriber, or half the cost of an access line, but the EBITDA generated per DSL subscriber is similar to a local-access line in our opinion (approximately $20 per month).

We also envision the local-exchange network, and more importantly, the "operating system" of the local network, as the critical building block of network-centric communication services over the next decade, which affords the RBOCs other unique advantages to create differentiated services by leveraging their ability to sell local-exchange, long-distance, broadband and wireless. These future services could include unified messaging, "follow-me calling," caller ID on multiple devices, and seamless integration with Microsoft Outlook and other PIMs for automatic updates, etc.. Verizon's recently announced plans to provide free ubiquitous wi-fi service through payphone hotspots to DSL customers is an example. The company's pending new *Digital Companion* product, which ties together wireline, wireless, email, and Microsoft Outlook functions, is another.

Verizon's Digital Companion

We believe a critical component of Verizon's strategy going forward is likened to that of Microsoft's, in that the local network (specifically the operating systems), is akin to Microsoft's PC operating system. Verizon believes that its control over the wired OSS will enable it to create unique bundled services with broadband, long-distance and wireless, helping it gain substantial market share in those products. We believe that this strategy has a good chance of success.

Verizon's new Digital Companion service is an example of this. The system, launching in phases throughout the year, uses private Verizon Web sites that track calls in real time and allow users to decide with a click, which calls should be routed to which wireless and wireline phone, and e-mail device as they come in. It also includes a phone service that reads out the contents of e-mail. The upshot is that consumers are always reachable through the means of their choice. For example, a call to a working mother from her son's school to her home could be forwarded to her workplace, or an instant message will pop up on her office computer with the school's Caller ID. Verizon is also trying to better connect its employees. Verizon's "digital dashboard" corporate intranet gives employees access to real-time data on the company's performance. These examples are just a few of the potential value added services that the RBOCs are capable of offering.

Verizon's DSL/Wi-Fi Initiative

On May 13th, Verizon announced:

1) a lowering of monthly DSL price by approximately 12% to $34.95 for the base offer (lower prices are available for bundled offers);
2) a doubling of the access speed to 1.5 megabits per second;
3) a bundling of wireless roaming (although in its infancy) for free for monthly DSL subscribers; and
4) lastly, the previously announced bundling of Microsoft's latest ISP browser, which contains various applications and content.

This announcement, along with the company's local/long-distance bundling, are two of the most important consumer service announcements that Verizon has had in several years, in our opinion. The goal is to both increase market share of broadband and to reduce market share losses to UNE-P and wireless, and shield against future attacks from cable telephony. In addition, paring this with flat rate local and long plans increases Verizon's overall revenue per customer.

The cable companies have had a two-year head start in broadband, and have 70% market share as a result. Part of the reason for the head start was technical, but much of it was regulatory. We believe that both these problems are now behind the RBOCs. As a result the RBOCs are upgrading their DSL coverage from 65% of access lines to approximately 80% by year-end, with improvements thereafter.

The holy grail of service companies is to have a differentiated service that is impossible to replicate. We believe that Wi-Fi could be this for Verizon, but it will have to bundle it aggressively with other services and have extensive coverage to thwart competitive entry. Verizon has established 150 Wi-Fi "hot-spots" in Manhattan, which will allow existing Verizon online subscribers high speed Internet access at no extra cost. The number of "Hot-spots" is expected to expand to 1,000 by year-end. This would effectively cover most of Manhattan. A user can wirelessly access the Internet by up to 300 feet away from a "hot-spot" using Wi-Fi compatible laptops, PDA's and pocket PC's. Hot Spots are currently located at select public telephones. The cost of each hot-spot is estimated to be $5,000 by Verizon (the average being high due to the need to provide power at the phone booths); however, we expect this to drop to well below $1,000 if this service is deployed in volume.

This is a unique service because of VZ's ownership of the telephone booths. It is hard to see how anyone else can replicate this anytime soon. This combined with improved coverage and better pricing than the cable companies should enable Verizon to reach its DSL market share goal, which will entail more than doubling its current subscriber additions per quarter.

Verizon cannot afford to lose their broadband customers as this will eventually lead to attrition of their very profitable local voice service. Where the few cable companies have launched voice services over cable plant, they have gained 30% penetration. Competition from UNE-P is a similar concern. Once these customers are lost, there is a good chance that the long-distance companies can keep these customers and begin to up sell broadband and other value added services. Having a differentiated product now will help stem market share losses. Keeping access line customers is a no-brainer, since the net present value of a fully bundled high-end RBOC customer is worth over $4000, while an average RBOC customer fully-bundled is worth $3,300, and a UNE-P customer is worth only $960 to an RBOC (Exhibit 6).

Exhibit 6. Weighted Average ARPU Per Household for an RBOC

	UNE-P	High-end Completely Bundled Customer	Average Completely Bundled Customer
Local	$20	$50	$38
LD	-	20	13
Wireless	15	45	35
ISP Access	5	20	16
	$40	$135	$102
Estimated OI Margins	20%	30%	30%
EBITDA Per House	$8	$41	$31
NPV of Customer	$960	$4,374	$3,305

Source: CIBC World Markets Corp.

Analysis of Profitability

As we wrote above, other than the physical diversity of the RBOCs' assets to provide the required services, we believe that they also have a lower cost structure and better customer relationships than most of these competitors. A majority of the cost in communications are customer acquisition, care and billing, and the RBOCs are providing these services for local exchange anyway to 90% of the population, and bundling new services does not increase these costs very much. In addition, per unit acquisition costs decline. The RBOCs are experiencing almost 50% less churn for customers that take three or more services in a flat rate bundle. Ongoing operating costs of providing new services are also low; the RBOCs can buy long-distance for less than a half a cent per minute.

There have been a lot of questions regarding the profitability of DSL services for RBOCs. Frankly, we do not understand the concern. Recurring service models take a substantial time to become profitable. Scale has been a problem in DSL, but once it is achieved, we believe that the incremental revenues for the RBOCs will be highly profitable. The monthly revenues are similar to local exchange services, yet the capital costs are less than 30% that of local, and we believe a steady-state customer will have similar operating costs as local-exchange.

The same holds true for bundling of voice services in flat rate pricing. Overall, costs for the underlying transport of communications services are dropping in-line with Moore's law, and while sales, marketing and customer care costs have not, bundling substantially reduces these costs.

Customer churn in particular is the largest cost for any competitive service. Bundles reduce churn.

For the above reasons, we believe that the RBOCs will be able to maintain overall margins slightly below where they are currently (200-300 basis points below on average) and keep capital expenditures relatively flat, with return on invested capital and free cash flow growing substantially. So even on our estimates for 2% revenue growth and flat EBITDA, EPS can still grow 6% on average.

Analysis Of Consumer Communications Market Share

Exhibit 7 looks at an average household spend per month for a full suite of voice/data/video services. We estimate that the average U.S. household spends $135 per month on this suite of services, up from $120 in 2000, and we estimate this will grow to $149 by 2006, a 4% compound average growth rate. This translates into a $200 billion consumer market by 2006, representing 57% of the combined $350 billion U.S. communications and video market, up from 53% this year.

We believe that the consumer market will grow faster than the business market over this time frame, primarily due to faster growth in wireless, broadband and video. In addition, the business market will experience more price competition in the small to medium sized business market. Long-distance and local–exchange prices have been well above costs in this market. In the large business market, customers will be migrating from higher cost legacy transport products (private line, frame, ATM, and circuit switched voice) to IP based services. Because IP continues to grow over 50% per year, we expect that once the business market has made this transition away from legacy services that revenues will begin to grow faster than the consumer market, as it did for much of the 1990s.

The focus of the different service providers is shifting to growing revenue per household. Initially this entails price reductions on a package basis in the 25% range, but overall revenues for the RBOCs can actually be up by 25% from selling new packages of services (long-distance and broadband Internet is usually incremental). So far, over 65% of the bundled customers have increased their average spending per month, and the overall average is approximately 20% higher than non-bundled customers. Over time, the incumbents will be able to continue adding unique services and eventually will be able to raise prices for the packages.

We estimate that the RBOCs have grown revenues in the consumer market from $66 billion in 2002 to $70 billion this year. All of this growth has come from long-distance, wireless and Internet access. This translates into average revenue per household of $52.68, up slightly from $52.06 in 2000, representing 39% market share currently down from almost 44% in 2000. **We believe that the RBOCs can stem the tide of this market share loss between now and 2006, and grow revenue per household to $57 representing a stable 38% of household spend.** Our analysis of market share losses and gains is shown in Exhibit 7.

Exhibit 7. Analysis of Consumer Video and Communications Market

2000
Consumer Video and Communications Market
Total # of US Households 106

	Spend Per Household	% of HH	Total U.S. Annual Spend	% of Market
Local	$36	120%	$54,950	36.1%
LD	18	120%	$27,475	18.1%
Cable	38	62%	$29,968	19.7%
Satellite	45	14%	$8,014	5.3%
Wireless	45	35%	$20,034	13.2%
Dial-Up ISP	20	40%	$10,176	6.7%
Broadband ISP	40	3%	$1,526	1.0%
Total			$152,144	
Revenue Per Household Per Month			$119.61	

2003
Total # of US Households 110

	Spend Per Household	% of HH	Total U.S. Annual Spend	% of Market
Local	$38	115%	$57,684	32.3%
LD	13	115%	$19,734	11.1%
cable	49	60%	$38,808	21.7%
satellite	45	20%	$11,880	6.7%
wireless	45	50%	$29,700	16.6%
dial-up	18	45%	$10,692	6.0%
broadband	38	20%	$10,032	5.6%
Total			$178,530	
Revenue Per Household Per Month			$135.25	

2006
Total # of US Households 113

	Spend Per Household	% of HH	Total U.S. Annual Spend	% of Market
Local	$37	115%	$57,698	28.6%
LD	13	115%	$20,272	10.1%
cable	58	58%	$45,616	22.6%
satellite	50	25%	$16,950	8.4%
wireless	45	60%	$36,612	18.2%
dial-up	18	30%	$7,322	3.6%
broadband	34	37%	$17,058	8.5%
Total			$201,529	100.0%
Revenue Per Household Per Month			$148.62	

Total Revenue CAGR from 2003-06	4.80%
Average revenue per house, CAGR	3.69%

Estimated 2003
Total U.S. Communications and Video Market
Includes Business and Residential

	2003	CAGR	2006
Total Telecom Market	$283,500	0.64%	$289,000
Satellite and Cable	$50,688	7.27%	$62,566
Total Market	$334,188		$351,566
Consumer Segment	$178,530	4.12%	$201,529
Business Segment	$155,658	-1.22%	$150,037

2000
Consumer Video and Communications Market
Facilities Based Market Share Estimates

	Telcos %	Telcos Amount	Cable %	Cable Amount	Wireless %	Wireless Amount	T %	T Amount	WCOM %	WCOM Amount	ISPs %	ISPs Amount	Other %	Other Amount
Local	95%	$52,203	1%	$275	1%	$550	2%	$1,099	1%	$550	0%	$0	1%	$275
LD	5%	$1,374	0%	$82	10%	$2,748	55%	$15,111	25%	$6,869	0%	$0	5%	$1,291
Cable	1%	$300	97%	$29,069	0%	$0	0%	$0	0%	$0	0%	$0	2%	$599
Satellite	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	100%	$8,014
Wireless	55%	$11,019	0%	$0	40%	$8,014	0%	$0	3%	$601	0%	$0	2%	$401
Dial-Up ISP	10%	$1,018	0%	$0	2%	$204	5%	$509	2%	$204	80%	$8,141	1%	$102
Broadband ISP	20%	$305	80%	$1,221	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0
Total		$66,218		$30,648		$11,514		$16,719		$8,223		$8,141		$10,681
Total Share		43.5%		20.1%		7.6%		11.0%		5.4%		5.4%		7.0%
ARPU		$52.06		$24.09										

2003
Consumer Video and Communications Market
Facilities Based Market Share Estimates

	Telcos %	Telcos Amount	Cable %	Cable Amount	Wireless %	Wireless Amount	T %	T Amount	WCOM %	WCOM Amount	ISPs %	ISPs Amount	Other %	Other Amount
Local	84%	$48,455	3%	$1,442	1%	$577	3%	$1,731	2%	$1,154	0%	$0	8%	$4,326
LD	15%	$2,960	4%	$789	18%	$3,552	35%	$6,907	17%	$3,355	0%	$0	11%	$2,171
Cable	2%	$582	96%	$37,256	0%	$0	0%	$0	0%	$0	0%	$0	3%	$970
Satellite	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	100%	$11,880
Wireless	46%	$13,662	0%	$0	51%	$15,147	0%	$0	0%	$0	0%	$0	3%	$891
Dial-Up ISP	10%	$1,069	0%	$0	2%	$214	5%	$535	2%	$214	80%	$8,554	1%	$107
Broadband ISP	28%	$2,809	70%	$7,022	0%	$0	0%	$0	0%	$0	0%	$0	2%	$201
Total		$69,537		$46,510		$19,490		$9,172		$4,722		$8,554		$20,546
Total Share		38.9%		26.1%		10.9%		5.1%		2.6%		4.8%		11.5%
ARPU		$52.68		$35.23										
ARPU Per Sub				$58.72										

2006
Consumer Video and Communications Market
Facilities Based Market Share Estimates

	Telcos %	Telcos Amount	Cable %	Cable Amount	Wireless %	Wireless Amount	T %	T Amount	WCOM %	WCOM Amount	ISPs %	ISPs Amount	Other %	Other Amount
Local	78%	$45,004	5%	$2,885	3%	$1,731	5%	$2,885	4%	$2,019	1%	$577	4%	$2,596
LD	35%	$7,095	5%	$1,014	23%	$4,663	20%	$4,054	9%	$1,824	0%	$0	8%	$1,622
Cable	3%	$1,368	96%	$43,791	0%	$0	0%	$0	0%	$0	0%	$0	1%	$456
Satellite	8%	$1,356	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	92%	$15,594
Wireless	42%	$15,377	0%	$0	51%	$18,672	0%	$0	0%	$0	0%	$0	7%	$2,563
Dial-Up ISP	10%	$732	0%	$0	2%	$146	5%	$366	2%	$146	80%	$5,858	1%	$73
Broadband ISP	36%	$6,141	60%	$10,235	0%	$0	0%	$0	0%	$0	0%	$0	3%	$512
Total		$77,074		$57,925		$25,212		$7,305		$3,990		$6,435		$23,416
Total Share		38.2%		28.7%		12.5%		3.6%		2.0%		3.2%		11.6%
ARPU		$56.84		$42.72										
ARPU Per Sub				$73.65										
2003-06 ARPU Growth		2.6%		6.6%										

Source: CIBC World Markets Corp.

This might seem counterintuitive, given that we expect local exchange lines to decline approximately 1% per year for the RBOCs. However, the 3% revenue growth comes entirely from increasing the average revenue per line in the 3%-4% range.

We believe that the natural rate of growth for access lines (this includes wired and wireless lines, and assumes that second lines stabilize in the 12%-14% range of households and begin to grow again) is 2%-3%. We expect the RBOCs to lose approximately this amount of market share per year on a physical basis (approximately half to cable the other half to wireless) and another 1% to resale. So net/net, the RBOCs should report line declines of approximately 1% per year.

Risks of Flat Rate Bundles

The competitive intensity in the industry rising and competitors are not backing down. Cable, LD and wireless companies are highly leveraged and cannot afford to lose much market share. Worse yet, even if these companies go bankrupt, they can keep operating, in which case, these competitors will be forced to lower pricing, although LD, wireless, and cable will have difficulty replicating the RBOCs' bundle, particularly if second lines are added in.

Bundles exert deflationary pressure from both high end users and the cannibalization of existing products. There may also be concern on the expense side.

The RBOCs will lose revenue from some high-end subscribers, but this is no more than 10%-20% of their customers, and they can manage very excessive usage. In addition, they currently have a very small market share of long-distance, so this revenue is new and incremental to them. The RBOCs are receiving close to $15-$20 in incremental revenue per month for long-distance versus an average of $10 based on per minute revenues (the average long-distance usage per household has declined from 180 minutes to 100 minutes due to wireless and e-mail cannibalization, and the industry is averaging $0.10 cents per minute or $10 per month). Typically, long-distance usage increases with a bundled package, but is not that different from that of per minute plans.

Historically, consumers have liked the certainty of flat rate pricing in the communications market and the ability to use as much as they like, but investors may be concerned with the costs for such products. We believe the long-distance experience is illustrative. The RBOCs can now buy long-distance services for $0.005 per minute including terminating access. Half of all calls, though, originate and terminate in-region, so the actual cost per minute is $0.003 versus revenue that is still in the 0.8 cents per minute range.

Additionally on the cost side, approximately 20%-30% of revenues in a competitive communications sector are spent on customer churn, customer care and billing. This expense can be cut in half through flat rate bundles.

On a strategic basis, the industry is converging around selling voice/data/video wireline and wireless services on a per household basis. This process is inevitable given customer demands for it and the marginal costs involved in providing it. The RBOCs are well positioned to provide these services and should take advantage of their first mover advantage.

Exhibit 8. Consumer Sub Valuations

Current Average Valuation Analysis for Consumer Subscribers
2003

	Estimated Valuation	Monthly Revenue	EBITDA Margin	Annual EBITDA	Annual CAPX	Operating Free Cash Flow	Subscriber Growth	ARPU Growth	EBITDA Multiple	FCF Multiple
RBOC	$1,100	$42	40%	$202	$100	$102	-2%	3%	5.5x	10.8x
Cable	3600	59	36%	255	$210	$45	0%	7%	14.1x	80.2x
Rural	3200	60	55%	396	$125	$271	0%	2%	8.1x	11.8x
Wireless	1500	45	30%	162	$130	$32	5%	1%	9.3x	46.9x

Note:
RBOC valuation is for wireline only.

Current Average Valuation Analysis for Consumer Subscribers
2006

	Estimated Valuation	Monthly Revenue	EBITDA Margin	Annual EBITDA	Annual CAPX	Operating Free Cash Flow	Subscriber Growth	ARPU Growth	EBITDA Multiple	FCF Multiple
RBOC	$1,100	$46	38%	$210	$90	$120	-1%	3%	5.2x	9.2x
Cable	3600	74	38%	337	$190	$147	0%	4%	10.7x	24.4x
Rural	3200	64	55%	422	$125	$297	0%	2%	7.6x	10.8x
Wireless	1500	45	34%	184	$80	$104	3%	1%	8.2x	14.5x

Note:
RBOC valuation is estimated wireline only.

Source: CIBC World Markets Corp.

Exhibit 9. Pricebox

CIBC World Markets

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Sector Recommendation: MARKET WEIGHT

	Rating	Closing Price 6/25	Stock Gain In 2002	Stock Gain Since 12/31/02	Price Target On Est. 2003 EPS [a]	Price Target Implied Upside	Market Cap. (Mil.)	Firm Value (Mil.)	2004E Revs (Mil.)	'04 Rev. Mult.	2003E Revs (Mil.)	Operating EPS excl. extraordinary gains/losses 2004E $ Amt.	2004E % YOY	2003E $ Amt.	2003E % YOY	2002	2001	P/E Multiple On 2004 EPS	P/E Multiple Rel. To S&P	5 yr. estim. EPS Grwth.	Firm Value to 2004 EBITDA EBITDA	Firm Value to 2004 EBITDA Multiple	Curr. Yield %	Div.
Tim Horan																								
Incumbents																								
AT&T (T)	SU	**$20**	-26%	-23%	NA	NA	$15,731	$27,663	$32,123	0.9x	$34,529	$1.14	-42.1%	$1.97	-44.7%	$3.56	$6.08	17.6x	0.99	-35%	$8,482	3.3x	3.7%	$0.75
BellSouth (BLS)	SO	**$28**	-32%	7%	$32	15%	51,727	66,557	27,346	2.4x	27,536	2.09	5.6%	1.98	-2.9%	2.04	2.26	13.3x	0.75	6%	11,671	5.7x	3.3%	$0.92
Qwest (Q)	SU	**$5**	-65%	-2%	NA	NA	8,494	28,394	13,594	2.1x	14,160	(0.35)	NM	(0.41)	NM	(0.48)	(0.72)	NM	NM	NM	3,819	7.4x	NA	NA
SBC Comm. (SBC)	SO	**$26**	-31%	-3%	$30	14%	87,658	104,043	49,352	2.1x	49,629	1.73	5.5%	1.64	-24.1%	2.16	2.34	15.2x	0.86	6%	17,805	5.8x	4.5%	$1.18
Sprint (FON)	SU	**$15**	-28%	1%	NA	NA	13,200	15,999	13,520	1.2x	13,954	1.10	-13.4%	1.27	-5.2%	1.34	1.06	13.3x	0.75	3%	4,011	4.0x	3.4%	$0.50
Sprint Combined FON+PCS					NA	NA	19,128	39,371												NM	7,599	5.2x	NA	NA
Verizon (VZ)	SO	**$41**	-18%	5%	$42	3%	113,424	155,020	57,496	2.7x	57,648	2.73	0.0%	2.73	-10.5%	3.05	3.00	14.9x	0.84	-1%	24,983	6.2x	3.8%	$1.54
MCI [d]	NR	**$25**	NA	NA	NA	NA	7,950	12,184	22,971	0.5x	24,700	4.25	172.4%	1.56	NM	NA	NA	5.9x	0.33	-15%	4,135	2.9x	NA	NA
Emerging																								
EarthLink (ELNK)	SO	**$8**	-55%	42%	$8	3%	1,333	840	1,517	0.6x	1,439	0.28	55.6%	0.18	NM	(0.22)	(0.83)	27.7x	1.56	50%	88	9.6x	NA	NA
Genesys (GNSY)	SU	**$3**	-85%	178%	NA	NA	43	152	194	0.8x	176	0.17	NM	(0.18)	NM	(1.26)	(3.21)	15.5x	0.87	20%	44	3.4x	NA	NA
ITXC (ITXC)	SO	**$2**	-68%	-2%	NA	NA	97	26	390	0.1x	351	(0.16)	NM	(0.61)	NM	(0.88)	(1.42)	NM	NM	NM	15	1.8x	NA	NA
Level 3 (LVLT)	SU	**$7**	-2%	41%	NA	NA	4,505	9,304	3,731	2.5x	4,115	(1.56)	NM	(1.23)	NM	(2.58)	(6.14)	NM	NM	NM	488	19.1x	NA	NA
Ptek (PTEK)	SO	**$5**	29%	17%	$7	36%	281	419	366	1.1x	354	0.48	33.3%	0.36	44.0%	0.25	(4.84)	10.7x	0.60	15%	85	4.9x	NA	NA
Raindance (RNDC)	SU	**$3**	-43%	-18%	NA	NA	143	113	81	1.4x	72	0.10	233.3%	0.03	200.0%	0.01	(0.34)	26.6x	1.50	30%	14	8.3x	NA	NA
WebEx (WEBX)	SP	**$14**	-40%	-7%	NA	NA	586	504	223	2.3x	179	0.73	62.2%	0.45	60.7%	0.28	(0.36)	19.0x	1.07	28%	63	8.0x	NA	NA
Cannon Carr																								
Independent Telcos																								
Alaska Comm. (ALSK)	SP	**$3**	-77%	83%	$5	48%	103	671	337	2.0x	337	(0.11)	NM	(0.56)	NM	(0.03)	(0.36)	NM	NM	NM	138	4.9x	NA	NA
Alltel (AT)	SU	**$49**	-17%	-4%	$45	-9%	15,378	21,390	7,790	2.7x	7,674	3.29	6.1%	3.10	-4.3%	3.24	2.84	15.0x	0.84	4%	3,237	6.6x	2.8%	$1.36
Cincinnati Bell Inc (CBB)	SU	**$7**	-63%	-76%	NA	NA	1,449	4,083	1,164	3.5x	1,708	0.66	NM	0.64	NM	(0.35)	(1.36)	NM	NM	NM	552	7.4x	NA	NA
Century Telep. (CTL)	SO	**$35**	-10%	20%	$35	-1%	5,068	8,468	2,350	3.6x	2,319	2.30	5.0%	2.19	-3.5%	2.27	NA	15.3x	0.86	6%	1,203	7.0x	0.6%	$0.21
Citizens Comm. (CZN)	SO	**$13**	-1%	24%	$13	0%	3,678	7,986	2,249	3.6x	2,443	0.56	27.3%	0.44	NM	(0.47)	(0.74)	23.3x	1.31	29%	1,171	6.8x	NA	NA
Commonwealth Tele. (CTCO)	SO	**$43**	-21%	20%	$45	5%	1,019	1,115	344	3.2x	332	2.56	4.5%	2.45	7.9%	2.27	1.39	16.8x	0.94	4%	175	6.4x	NA	NA
Wirelesss																								
AT&T Wireless (AWE)	SO	**$8**	-61%	43%	NA	NA	21,913	29,585	16,297	1.8x	16,068	0.21	31.3%	0.16	NM	(0.02)	0.00	38.5x	2.16	NM	4,616	6.4x	NA	NA
Nextel Comm. (NXTL)	SP	**$17**	5%	51%	NA	NA	18,291	28,856	10,560	2.7x	9,891	1.01	16.1%	0.87	NM	(0.17)	(1.73)	17.3x	0.97	NM	4,020	7.2x	NA	NA
Nextel Partners (NXTP)	SP	**$6**	-49%	2%	NA	NA	1,547	3,055	1,190	2.6x	958	0.04	NM	(0.58)	NM	(1.27)	(1.07)	NM	NM	NM	313	9.8x	NA	NA
Sprint PCS (PCS)	SU	**$6**	-82%	32%	NA	NA	5,928	23,372	13,010	1.8x	12,405	(0.30)	NM	(0.50)	NM	(0.63)	(1.27)	NM	NM	NM	3,588	6.5x	NA	NA
Triton PCS (TPC)	SO	**$5**	-87%	32%	$7	NA	343	1,702	891	1.9x	816	(0.81)	NM	(1.65)	NM	(1.81)	(2.67)	NM	NM	NM	249	6.8x	NA	NA
Total market cap (bill.)							*391,067*																	
S&P 500 (Consensus)		**$989**	**-23%**	**12%**								55.61	7.8%	51.60	7.6%	47.94	45.16	17.8x	--	7%			1.6%	$16.07

Notes:

(a) RBOCs are generally valued relative to the market P/E multiple; long-distance companies use various methods.

(b) BellSouth and Verizon price targets based on a 10% discount to market multiple; SBC at market multiple given greater earnings visibility.

(c) SBC and Verizon revenue and EBITDA adjusted for proportionate wireless stakes.

(d) Reorganizing in bankrupcty; estimated exit in September 2003; $25 per share stock price is proposed new equity share price.

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Source: CIBC World Markets Corp.

Companies Mentioned In This Report

Stock Prices as of 6/25/03:

Alaska Communications ((1, 9)(ALSK-OTC $3.31 Sector Performer)
AOL Time Warner ((4, 9a)(AOL-NYSE $15.27 Sector Performer)
AT&T Wireless Group ((2a)(AWE-NYSE $7.80 Sector Outperformer)
CenturyTel ((2, 3, 4, 9)(CTL-NYSE $34.69 Sector Outperformer)
Citizens Communications ((4, 9a)(CZN-NYSE $13.01 Sector Outperformer)
EarthLink, Inc. ((1, 9)(ELNK-OTC $7.55 Sector Outperformer)

Level 3 ((1, 4)(LVLT-OTC $6.81 Sector Underperformer-Speculative)
Nextel Communications ((1, 4, 9a)(NXTL-OTC $16.95 Sector Performer-Speculative)
PTEK Holdings ((1, 4, 9)(PTEK-NASDAQ $5.01 Sector Outperformer-Speculative)
Raindance Communications ((1, 9)(RNDC-OTC $2.50 Sector Underperformer-Speculative)
Sprint Corporation ((4, 9, 9a)(FON-NYSE $14.42 Sector Underperformer)
Triton PCS Holdings ((2a)(TPC-NYSE $5.09 Sector Outperformer-Speculative)
WebEx ((1)(WEBX-OTC $13.70 Sector Performer-Speculative)

Alltel Corporation ((4)(AT-NYSE $48.40 Sector Underperformer)
AT&T Corp. ((2, 2a, 4, 9, 9a)(T-NYSE $19.60 Sector Underperformer)
BellSouth (BLS-NYSE $27.16 Sector Outperformer)
Cincinnati Bell Inc. ((4)(CBB-NYSE $6.55 Sector Underperformer-Speculative)
Commonwealth Telephone ((1, 2, 9)(CTCO-OTC $43.10 Sector Outperformer)
Genesys Conferencing ((9, 9a)(GNSY-OTC $2.56 Sector Underperformer-Speculative)
Microsoft Corporation ((1, 2a, 9a)(MSFT-OTC $25.26 Sector Outperformer)
Nextel Partners, Inc. ((1)(NXTP-OTC $6.10 Sector Performer-Speculative)

Qwest Communications (Q-NYSE $4.77 Sector Underperformer-Speculative)
SBC Communications ((4)(SBC-NYSE $25.80 Sector Outperformer)

Sprint PCS ((4, 9a)(PCS-NYSE $5.71 Sector Underperformer-Speculative)
Verizon ((2a, 4, 9, 9a)(VZ-NYSE $39.85 Sector Outperformer)
WorldCom (WCOE-OTC $0.83 Not Rated)

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Company Ratings		
SO	Sector Outperformer	Stock is expected to outperform the sector during the next 12-18 months.
SP	Sector Performer	Stock is expected to perform in line with the sector during the next 12-18 months.
SU	Sector Underperformer	Stock is expected to underperform the sector during the next 12-18 months.
NR	Not Rated	Stock is not covered by CIBCWM.
Company Ratings Prior To August 26th 2002		
SB	Strong Buy	Expected total return over 12 months of at least 25%.
B	Buy	Expected total return over 12 months of at least 15%.
H	Hold	Expected total return over 12 months of at least 0%-15%.
UP	Underperform	Expected negative total return over 12 months.
S	Suspended	Stock coverage is temporarily halted.
DR	Dropped	Stock coverage is discontinued.
R	Restricted	Restricted
UR	Under Review	Under Review
Sector Weightings**		
O	Overweight	Sector is expected to outperform the broader market averages.
M	Market Weight	Sector is expected to equal the performance of the broader market averages.
U	Underweight	Sector is expected to underperform the broader market averages.
NA	None	Sector rating is not applicable.

**Broader market averages refer to the S&P 500 in the U.S. and S&P/TSX Composite in Canada.
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Sector Outperformer (Buy)	297	33.2%	Sector Outperformer (Buy)	189	63.6%
Sector Performer (Hold/Neutral)	385	43.0%	Sector Performer (Hold/Neutral)	224	58.2%
Sector Underperformer (Sell)	213	23.8%	Sector Underperformer (Sell)	99	46.5%
Ratings Distribution: Telecommunications Services Coverage Universe					
(as of 26 Jun 2003)	**Count**	**Percent**	**Inv. Banking Relationships**	**Count**	**Percent**
Sector Outperformer (Buy)	11	42.3%	Sector Outperformer (Buy)	9	81.8%
Sector Performer (Hold/Neutral)	4	15.4%	Sector Performer (Hold/Neutral)	2	50.0%
Sector Underperformer (Sell)	11	42.3%	Sector Underperformer (Sell)	6	54.5%

Telecommunications Services Sector includes the following tickers: ALGX, ALSK, AT, AWE, BLS, CBB, CTCO, CTL, CWON, CZN, ELNK, FON, GNSY, GRIC, ITXC, LVLT, NTLOQ, NXTL, NXTP, PCS, PTEK, Q, RNDC, SBC, T, TPC, TWTC, VZ, WEBX.

Ratings Distribution: CIBC World Markets Coverage Universe (as of 25 Jun 2003)	Count	Percent	Inv. Banking Relationships	Count	Percent
Sector Outperformer (Buy)	297	33.2%	Sector Outperformer (Buy)	189	63.6%
Sector Performer (Hold/Neutral)	385	43.0%	Sector Performer (Hold/Neutral)	224	58.2%
Sector Underperformer (Sell)	213	23.8%	Sector Underperformer (Sell)	99	46.5%
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Attachment 2

Rebuttal Testimony of Lee L. Selwyn
on behalf of AT&T Communications of New Jersey and
MCI Telecommunications Corporation,
filed August 31, 1998

Before the

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

In the Matter of Petition of AT&T Communications of New Jersey, Inc. for Determination of Compliance By Bell Atlantic–New Jersey, Inc.'s Selective Calling and Intramunicipal Calling Services with Imputation Requirements	BPU Docket No. TO97100808 OAL Docket No. PUCOT 11326-97N

Rebuttal Testimony

of

LEE L. SELWYN

on behalf of

AT&T Communications of New Jersey, Inc.
and
MCI Telecommunications Corporation

ALLEGEDLY PROPRIETARY MATERIAL HAS BEEN REDACTED

August 31, 1998

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INTRODUCTION

Qualifications

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Lee L. Selwyn; I am President of Economics and Technology, Inc. ("ETI"), One Washington Mall, Boston, Massachusetts 02108. Economics and Technology, Inc. is a research and consulting firm specializing in telecommunications economics, regulation, management and public policy.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PREVIOUS EXPERIENCE IN THE FIELD OF TELECOMMUNICATIONS REGULATION AND POLICY.

A. I have prepared a Statement of Qualifications, which is attached hereto as Appendix 1.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE NEW JERSEY BOARD OF PUBLIC UTILITIES OR ITS PREDECESSOR?

A. Yes, I have appeared before this Board on several occasions dating back to the mid-1970s. In May 1976, I submitted testimony to the New Jersey Board of Public Utility Commissioners in Docket 7512-1251 on behalf of the New Jersey Retail Merchants Association that addressed numerous rate design issues relative to New Jersey Bell's requested rate increase. In August 1978, I submitted testimony before the Board on behalf of the New Jersey Retail Merchants Association in Dockets 7711-1136, 784-278, 784-279, concerning the pricing of New Jersey Bell's vertical services and terminal equipment. My

most recent appearance was in 1992, when I testified in Docket T092030358 on behalf of the New Jersey Cable Television Association ("NJCTA") regarding New Jersey Bell's Alternative Regulation Plan.

Assignment

Q. ON WHOSE BEHALF IS THIS TESTIMONY BEING OFFERED?

A. This testimony is offered on behalf of AT&T Communications of New Jersey, Inc. ("AT&T") and MCI Telecommunications Corporation ("MCI").

Q. WHAT IS THE NATURE OF YOUR ASSIGNMENT IN THIS PROCEEDING?

A. AT&T and MCI have requested that I respond to the testimony offered by Bell Atlantic-New Jersey ("BA–NJ") witness William E. Taylor regarding the application of the imputation standard that the Board adopted in its *Order Approving Further Settlement* dated June 30, 1994 in Docket Nos. TX90059349, TE92111047, TE93060211[1] specifically with respect to Selective Calling Service (SELEX) and Intramunicipal Calling (IMC).

1. *In the Matter of Petitions of MCI, Sprint and AT&T for Authorization of IntraLATA Competition*, Docket Nos. TX90059349, TE92111047, TE93060211.

Summary of testimony

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. My testimony will address and discuss the appropriate treatment of BA–NJ's SELEX and IMC services with respect to definition, availability, imputation of access charges, and the level of access charges that are appropriate for these services.

- SELEX and IMC are separate and distinct services that must be required to satisfy the Board's imputation standard on a stand-alone basis. By aggregating these services with other highly-profitable toll services, BA–NJ can effectively cross-subsidize SELEX and IMC and thereby prevent competitors from offering comparable pricing plans. By requiring that customers presubscribe to BA-NJ's intraLATA toll service as a condition for obtaining the low-priced SELEX and IMC, BA-NJ will deter SELEX and IMC customers from selecting an alternative intraLATA toll provider and thereby allow BA–NJ to continue to realize supracompetitive profits from its intraLATA toll services.

- IXCs desiring to offer their customers comparable flat-rated pricing plans for calls to nearby communities should be subject to cost-based access charges that likely would be equivalent to the local call termination rates established by the Board in the Local Competition Proceeding.

- The conditions under which SELEX and IMC are provided make them *de facto* monopoly services that BA-NJ has tied to its competitive intraLATA toll services, in that BA–NJ will furnish these services only to those of its local service customers who

select BA–NJ as their intraLATA toll primary interexchange carrier ("PIC"). Such tying arrangements foreclose providers other than BA–NJ from effectively competing in the New Jersey intraLATA toll market, and permit BA–NJ to set its own intraLATA toll prices at supracompetitive levels. The Board should not permit BA–NJ to maintain and enforce this anticompetitive tying arrangement. The classification of these services as "toll" should not provide a basis to continue this tying requirement.

SELEX AND INTRAMUNICIPAL CALLING SERVICES

The Board's imputation requirement must be separately satisfied for each category of toll service.

Q. ARE YOU FAMILIAR WITH BA–NJ'S SELECTIVE CALLING (SELEX) AND INTRAMUNICIPAL CALLING (IMC) SERVICES AND WITH THE SPECIFIC ISSUES THAT HAVE BEEN RAISED BY THE PETITIONERS IN THIS CASE?

A. Yes. I have reviewed the tariff provisions relating to both SELEX and IMC. I am also aware that in May of 1997, BA–NJ informed its SELEX and IMC customers that BA-NJ would no longer furnish these services to them if they selected an intraLATA toll carrier other than BA–NJ because it considers these services to be "toll" services and, as such, SELEX and IMC constitute elements of the customer's intraLATA toll calling "plan."

However, when considered as "toll" services, SELEX and IMC are priced below the level of the switched access charges that a competing interexchange carrier would be required to pay in order to offer these services, and therefore fail to satisfy the Board's imputation requirement except when aggregated with other BA–NJ toll services that are priced by-the-call. In its Petition, AT&T states that these services should be required to satisfy the imputation requirement on a stand-alone basis.

Q. WHAT IS YOUR UNDERSTANDING OF THE IMPUTATION REQUIREMENT THAT HAS BEEN ADOPTED BY THIS BOARD WITH RESPECT TO BA–NJ'S PRICING OF ITS INTRALATA TOLL SERVICES?

A. When New Jersey intraLATA toll service was opened to 10XXX competition on July 1, 1994, for the first time BA–NJ was placed in the position wherein it would be competing

directly with the very same IXCs to whom it furnished access services. By virtue of its control of this essential monopoly bottleneck service, BA–NJ would be in a position, if not otherwise constrained, to create a price squeeze for its competitors by, for example, setting its retail intraLATA toll rates *below* the access charges it imposed upon those IXCs with which it competed in the intraLATA toll market. Thus, because BA–NJ is the monopoly provider of access services that are required by competing interexchange carriers in order for them to offer toll services that compete with BA–NJ, it has both the incentive *and the ability* to increase its competitors' costs and thereby limit potentially more efficient competitors' ability to offer competing services at competitively attractive prices.

Recognizing this possibility, the Board established an "imputation requirement" with the specific goal of confronting BA–NJ with an imputed level of access charges for its own intraLATA toll services equal to the actual access charges it imposes upon its competitors:

> The need for an imputation standard arises because BA–NJ operates as both an intraLATA toll competitor and as a provider of essential access connections that its competitors use to provide their services. An appropriate imputation standard must ensure that BA–NJ cannot price its services at a level that is below the access rates charged to IXCs.[2]

2. *Order Approving Further Terms of Settlement* at 1; *accord*, *N.J.A.C.* 14:10-10.5(a).

Q. SHOULD THIS IMPUTATION REQUIREMENT APPLY TO SELEX AND IMC AS STAND-ALONE SERVICES?

A. Yes. Specifically, while BA–NJ apparently concedes that SELEX and residential IMC services do not satisfy the Board's imputation standard on a stand-alone basis, it contends that these plans must be combined with BA–NJ's other intraLATA toll services which, if done, does satisfy the imputation requirement. I believe that BA–NJ's position is wrong both on economic and on public policy grounds, for several specific reasons:

- If these services are not required to satisfy the imputation requirement on a stand-alone basis, it would defeat the specific purposes and objectives of the imputation requirement as articulated by the Board. Indeed, the Board was quite clear on this point in its rules when it directed that "the rates charged for *any LEC toll service* ... shall equal or exceed" the rates derived in accordance with the imputation formula.[3] Had the Board intended that the imputation requirement be satisfied only in the aggregate, it would have used language such as "all LEC toll services" rather than "any LEC toll service."

- The specific purpose of an imputation requirement is to assure that vertically integrated (monopoly/competitive) providers, such as BA–NJ, confront the same costs for essential services as non-integrated rivals such that a more efficient competitor would be able to set its retail price for the same or equivalent retail service below that of the vertically integrated incumbent. When services such as SELEX are priced below the

3. *N.J.A.C.* 14:10-10.7(a) (emphasis supplied).

level of access charges that would be imposed upon a non-integrated competitor offering the same service, the competitor would be forced to (a) price its service below its cost, (b) price its service in excess of the incumbent's price *even if it is more efficient*, or (c) not provide the service at all.

- Application of the imputation test at an aggregate level will thereby allow the vertically integrated firm to successfully exclude more efficient retail-stage competitors to the detriment of competition and consumers.

Q. WHY WOULD ADOPTION OF AN IMPUTATION REQUIREMENT ONLY ON AN AGGREGATE BASIS DEFEAT THE SPECIFIC PURPOSE OF IMPOSING AN IMPUTATION REQUIREMENT IN THE FIRST PLACE?

A. The intraLATA toll "market" consists of a number of separate and distinct segments, each with its own set of demand, supply, and competitive conditions. BA–NJ's market power may vary considerably across the various segments. For instance, it has a near-monopoly in the case of residential/small business Direct Distance Dialed ("DDD") toll service, but confronts varying levels of competition in the business MTS and 800 service segments. A major source of the difference in BA–NJ's market power across the various market segments can be traced to the relative importance of the 1+ dialing advantage that BA–NJ enjoyed until May of 1997 and that it continues to enjoy even today, except where customers affirmatively request a change in their intraLATA toll PIC.

If permitted to satisfy the imputation requirement only in the aggregate, i.e., across the entirety of its intraLATA toll business, BA–NJ would be capable of cross-subsidizing the

more competitive segments of its market with supracompetitive profits generated in the less competitive segments, thereby imposing highly targeted price squeezes that work to foreclose entry in precisely those areas where entry conditions would otherwise be most favorable. In the case of SELEX/IMC, BA–NJ is able to use excess profits from DDD by-the-call rated toll services to support below-cost pricing of SELEX and IMC as the "hook" to keep its captive *local service* customers in its intraLATA toll customer base as well. In fact, BA–NJ's prices for non-SELEX/IMC intraLATA toll are sufficiently high that, even with the indisputably below imputation cost prices it applies for SELEX and IMC, it is able to satisfy the imputation requirement when applied on an aggregate level.

Q. HAS DR. TAYLOR CORRECTLY DEFINED THE RELEVANT MARKET FOR COMPETITIVE ANALYSIS?

A. No, he hasn't. In apparent reliance upon the United States Department of Justice *Horizontal Merger Guidelines*,[4] Dr. Taylor contends that "the hypothetical economic question in this case is: If residence or business customers were faced with a price increase for BA–NJ intraLATA toll service, to which service would the customers turn?"[5]

From an economic perspective and under the *Horizontal Merger Guidelines,* a proper market definition inquiry begins with a narrow product (service) and asks the question, could a hypothetical monopolist over that service raise prices by a small but significant and

4. U.S. Department of Justice and the Federal Trade Commission, *Horizontal Merger Guidelines*, April 2, 1992.

5. Taylor (BA-NJ), at 5.

nontransitory amount?[6] If the answer to that question is "yes," then the relevant market has been identified. If, however, in response to the price increase consumers would switch to alternative services in sufficient amounts that the price increase of the monopolist would be defeated, then the market must be expanded to include those services and the market definition exercise repeated. This exercise continues until the smallest service (and geographic) market areas are identified that could, in response to a price increase by the hypothetical monopolist, sustain the price increase.

In order to be valid, however, the test must be applied without specific reference to any self-serving product definition or tying arrangement that may otherwise prevail. In fact, what Dr. Taylor does here is to apply the DoJ test tautologically. He states: "The answer is that customers would compare the overall charges for (and other attributes of) BA–NJ toll service, including SELEX and/or IMC, with the alternatives available from other carriers."[7] Obviously, if the customer is *forced* to include what are in fact separate products/services in a single purchase decision (due to the presence of a tying requirement), then customers will be forced to make the type of evaluation that Dr. Taylor describes *even if they do not normally consider these services to be components of "toll" or are in possession of sufficient information upon which to make the proper economic choice*.

The correct question, and the one that Dr. Taylor sidesteps entirely, is whether, given the ability to make separate and rational purchase decisions as among these services, would the customer be likely to do so and, if permitted to do so, would the customer potentially select

6. *Horizontal Merger Guidelines*, at §1.0.

7. *Id.*

different providers for these services? Given the existence of BA–NJ's tying requirement, the only way in which this question can be addressed is by examining how customers *perceive* these services — if they are perceived as separate and potentially subject to separate purchase decisions, then the DoJ standard is distinctly *not* satisfied. Since the specific tying arrangement at issue here was not imposed until May, 1997, the pre-tying perceptions, coupled with the pre-tying portrayals of these services by BA–NJ itself, provide dispositive and relevant guidance that can and should be used in lieu of the self-serving definitions being advanced by Dr. Taylor and his client.

Specifically, Dr. Taylor's suggestion that customers "would compare the overall charges for (and other attributes of) BA–NJ toll services, including SELEX and/or IMC, with the alternatives available from other carriers" is simply not the case.

Q. WHY NOT?

A. In order for customers to make the kind of choices that Dr. Taylor describes, the customer must *perceive* SELEX and IMC as constituting an integral part of the overall BA–NJ toll calling "plan" to which they subscribe, and not just because BA–NJ has imposed a requirement that treats it as such. However, customers were very unlikely to view SELEX or IMC as standard "toll" services and, thus, probably treated these services as part of local service; indeed, BA–NJ, in recognition of this condition, found it necessary to communicate with its SELEX customers specifically to advise them that BA-NJ considered these services to be "toll."

Q. DR. TAYLOR ALSO ATTEMPTS TO DEMONSTRATE THAT BA–NJ WOULD HAVE NO INCENTIVE TO ENGAGE IN A PRICE SQUEEZE BECAUSE IT WOULD BE ABLE TO CAPTURE THE SAME LEVEL OF MONOPOLY PROFIT FROM ACCESS SERVICES AS IT REALIZES WHEN IT PROVIDES TOLL SERVICE DIRECTLY TO THE RETAIL CUSTOMER. PLEASE COMMENT ON HIS ANALYSIS.

A. In the analysis presented in Attachment 1 to his testimony, Dr. Taylor appears to concede that BA–NJ has the ability to capture monopoly rents (i.e., supracompetitive profits) from its *access* services. According to that analysis, however, BA-NJ would not be able to generate any *additional* monopoly rents from its toll services provided at retail. Dr. Taylor's analysis on this point is both simplistic and wrong. In fact, any device that BA–NJ can employ that works to discourage its monopoly local exchange service customers from switching to another intraLATA toll provider gives BA–NJ the opportunity to generate *additional monopoly rents* from the non-access portion of its toll services *over and above those that would be available to BA-NJ specifically from access*.

Q. TO WHAT TYPES OF DEVICES ARE YOU REFERRING?

A. The pre-May, 1997 1+ dialing advantage is a particularly good example. Without IXC presubscription in place, an ILEC could readily exploit the inherent customer inertia by charging more for its intraLATA toll services than could a competing IXC whose service required that customers "dial around" using the 10XXX access code. And even though IXCs now can offer their customers intraLATA toll presubscription, customers must affirmatively change their intraLATA toll PIC or else remain with BA–NJ by default.[8]

8. Contrast this, for example, to the case of *inter*LATA presubscription. Under the terms of the *Modification of Final Judgment* that broke up the former Bell System and that required

Finally, BA–NJ has been able to perpetuate customer preference for the incumbent's intraLATA services by its policies with respect to SELEX and IMC. Each of these devices permit BA–NJ to generate monopoly rents on its intraLATA toll services that are in addition to those it can earn through the switched access services it furnishes to IXCs. Thus, the premise of Dr. Taylor's analysis is flawed on its face, and the incentive to engage in a price squeeze that he claims BA–NJ does not confront is, in reality, fully operational. BA–NJ thus gains a clear and non-replicable competitive advantage if it can perpetuate the existing SELEX/IMC price squeeze, which it will be able to do if its imputation requirement is applied only in the aggregate, rather than separately to each specific intraLATA toll service.

Q. ARE THERE OTHER WAYS IN WHICH BA–NJ CAN GENERATE SUPRACOMPETITIVE PROFITS FROM ITS RETAIL TOLL BUSINESS THAT ARE OVER AND ABOVE THOSE AVAILABLE TO IT FROM SWITCHED ACCESS?

A. Yes. In addition to the enormous marketing advantages that BA–NJ realizes as a direct result of its incumbency in the market, BA-NJ also enjoys numerous operational efficiencies resulting from the integration of its monopoly access and competitive retail toll service businesses. These efficiencies are not captured in any imputation requirement, are not available even to more efficient (in the absolute sense) competitors, and are solely

(..continued)
BOCs to provide all IXCs with "equal access" (i.e., 1+ presubscription), whenever "equal access" become available in a particular BOC central office, customers served therefrom would be mailed a "ballot" that they could use to select a primary interexchange carrier. Customers not responding to the "equal access ballot" would be randomly assigned to IXCs (other than the then-incumbent AT&T) in proportion to the IXC selections affirmatively made on the ballots. No analogous balloting requirement was adopted with respect to New Jersey *intra*LATA toll services when intraLATA "equal access" presubscription become available in May, 1997.

attributable to BA–NJ's incumbency. Examples of these integration efficiencies include BA–NJ's ability to market and bill its competitive intraLATA toll services together with its monopoly local services, common brand identification, and access to the personnel, know-how, customer lists, and other resources of its monopoly local service business. Such incumbency-generated efficiencies have unique value to BA–NJ, and could well be captured in an imputation requirement just like other self-provided services and resources. At the very least, therefore, the presence of the numerous incumbency advantages that are not directly captured in existing imputation requirements demands that even if ambiguities did exist, and they do not, in the application of the current imputation rule they should be resolved in favor of competitors who do not possess these integration and incumbency advantages.

Q. ARE THERE ANY OTHER REASONS WHY DR. TAYLOR'S INTERPRETATION OF THE IMPUTATION REQUIREMENT IS AT ODDS WITH THE BOARD'S STATED PURPOSES?

A. Yes. As long as BA–NJ is able to generate monopoly rents from *any* subset of its overall toll market, it would, under an aggregate rather than a stand-alone service-specific imputation requirement, be able to cross-subsidize and impose a price squeeze upon any other service BA-NJ offers merely by somehow defining that service as toll. SELEX and IMC are a case in point: BA–NJ can use its monopoly rents from the remainder of the toll market (as expansively defined) to foreclose competition for SELEX and IMC. The same theory would also permit BA–NJ to re-define and thereby to include other services from which it currently derives monopoly rents as toll services, thereby increasing the "pot" of excess profits from which it can draw to support below-cost pricing of additional

competitive services. For example, BA–NJ's prices for such discretionary services as Call Waiting and Caller ID are set well in excess of their cost; if these services were to be defined as "toll" for purposes of applying an aggregate imputation standard, then BA-NJ could expand its below-cost offerings in potentially more competitive markets while still nominally satisfying the imputation requirement. Conferring such a capability upon BA–NJ would make no sense, and is clearly at odds with what the Board was expressly seeking to accomplish when it articulated an imputation rule.

Q. DR. TAYLOR CONTENDS THAT BA–NJ'S POLICY OF SETTING SELEX AND IMC RATES BELOW THE CORRESPONDING ACCESS CHARGES THAT A COMPETITOR WOULD BE REQUIRED TO PAY IN ORDER TO OFFER THESE SAME SERVICES AT THE SAME BA–NJ PRICES IS NO DIFFERENT THAN OTHER SITUATIONS IN WHICH INDIVIDUAL MESSAGE TOLL RATE ELEMENTS ARE PRICED BELOW THE ACCESS CHARGE. HE SPECIFICALLY CITES MCI'S "5 CENT SUNDAY" RATE AND VARIOUS OFF-PEAK SHORT-DISTANCE RATES THAT HE CLAIMS ARE INDIVIDUALLY LESS THAN THE ORIGINATING PLUS TERMINATING ACCESS CHARGES THAT THE IXC WOULD BE REQUIRED TO PAY TO HANDLE SUCH CALLS.[9] DO YOU AGREE THAT THE "5 CENT SUNDAY" AND OTHER PROMOTIONAL SITUATIONS ARE ANALOGOUS TO SELEX AND IMC, AS DR. TAYLOR SUGGESTS?

A. No, I do not, for several reasons. First, SELEX and IMC are discrete service offerings that are portrayed to customers as separate and distinct from message toll service; indeed, the first specific instance in which these were explicitly linked occurred, to the best of my knowledge, when BA–NJ sent letters to its customers in May of 1997 advising them that they would lose their SELEX service if they selected a PIC other than BA–NJ for intraLATA toll calls. MCI's "5 cent Sunday" offer and individual off-peak toll rate elements are not discrete services that are marketed independently of the other, higher-priced toll

9. Taylor (BA-NJ), at 8.

offerings. Customers who select MCI know that the 5 cent rate applies only on Sundays and that higher rates apply at other times. They also know that they must select MCI as their PIC in order to get the 5 cent Sunday rate, and that they can't have MCI as their PIC on Sundays and another IXC as their PIC on other days. The 5 cent Sunday rate and other promotional toll rates are designed as specific marketing strategies to induce customers to switch to MCI (in this case) or to some other provider; such rates are no different than weekly specials at a supermarket or "free" books or CDs that are offered as inducements to join a book or CD club.

SELEX and IMC were never created nor intended to serve as promotional rates designed to induce customers to select BA–NJ as their intraLATA toll provider. Indeed, both of these services pre-date, by many years, the introduction of intraLATA toll competition in New Jersey and, in the case of IMC in particular, the service wasn't even considered to be "toll" at all until BA–NJ redefined it as such concurrently with the introduction of intraLATA equal access. Whereas MCI, the supermarket, and the book club each have an expectation of being able to recover any purported "loss" from providing the ostensibly below-cost product (the 5 cent Sunday call,[10] the special on Cheerios, or the four free books) through other purchases made by the same customer at prices that have been purposefully set to offset the promotional "losses," BA–NJ can have no similar expectation with respect to SELEX and IMC, and does not, for example, charge higher intraLATA toll rates to SELEX/IMC customers than it imposes upon others who do not use these services. Indeed, SELEX and business IMC may even be profitable relative to BA–NJ's *actual* (not imputed)

10. In fact, MCI's 5 cent Sunday offer is only applicable to interstate calls and is generally sufficient to recover interstate access charges.

cost of providing these services, in which case there is no "loss" to be made up. SELEX and IMC prices were never set with the objective or expectation that they would provide the level of "contribution" that was customarily obtained from toll services, and were not specifically "subsidized" by other toll services that did generate contribution, which was used primarily to support below-cost residential access line service. BA–NJ can — and does — create various promotional offers that are analogous to MCI's and the book club's — things like waiving installation charges for additional lines or vertical features like Caller ID, or "packages" of vertical features that are priced below the individual prices of the constituent services. In the case of SELEX and IMC, BA-NJ has instead attempted to hook its potentially competitive toll services to pre-existing elements of *local-type* service specifically to deter customers from switching toll providers. SELEX and IMC were never introduced to serve as promotional offerings, and cannot be viewed as being analogous to them.

Q. ARE YOU AWARE OF OTHER SITUATIONS IN WHICH SELEX AND IMC ARE, FROM THE CUSTOMER'S PERSPECTIVE, NOT LINKED TO OTHER INTRALATA TOLL CALLING, AND WHERE BA–NJ'S POLICY OF PRICING THESE TWO SERVICES BELOW THE LEVEL OF IMPUTED ACCESS CHARGES WORKS TO EXCLUDE IXCS FROM THIS (UNLINKED) SEGMENT OF THE TOLL MARKET?

A. Yes. Medium and large business customers who use programmable PBXs have the capability to continue to use BA–NJ for IMC and SELEX, while routing all other intraLATA toll calling to an alternate carrier. This is accomplished by selecting BA–NJ as the customer's PIC, while using the PBX to route non-IMC/non-SELEX toll calls to an IXC either via a '101XXXX' access code or by means of dedicated (e.g., T-1) access. The same capability is also available to certain institutional customers, such as college dormitories,

who qualify for "residential PBX trunk" service[11] and who can similarly select BA-NJ as their intraLATA PIC while routing non-SELEX/non-IMC intraLATA toll calls to an IXC via either a 101XXXX access code or a dedicated T-1 access line. If IXCs are required to pay access charges in excess of the SELEX and IMC rate levels, they are effectively excluded from providing these services to their customers even though BA-NJ can actually furnish them at a profit relative to its actual (non-imputed) cost.[12]

Q. BUT IF — AS BA-NJ CONTENDS — TAKEN TOGETHER SELEX/IMC AND TOLL ARE PROFITABLE RELATIVE TO IMPUTED ACCESS CHARGES EVEN WHEN THE IMPUTATION IS MEASURED ONLY WITH RESPECT TO SELEX/IMC CUSTOMERS, WHY CAN'T AT&T OR OTHER IXCS OFFER THESE SAME SERVICES TO SMALL RESIDENTIAL AND BUSINESS CUSTOMERS AT THE SAME BA–NJ RATES AND STILL MAKE A PROFIT?

A. IXCs cannot realistically provide flat-rated services like SELEX and IMC if they are forced to pay out-of-pocket above-cost per-minute access charges. While Dr. Taylor attempts to equate "opportunity cost" as confronted by BA–NJ with actual out-of-pocket payments that would be incurred by an IXC for the access services it required in order to furnish flat-rated SELEX and IMC type services to its customers, Dr. Taylor fails to demonstrate that such

11. B.P.U. - N.J. No. 2, A2.2.1.D, 1st Rev. Pg. 12 (June 11, 1984). Residential PBX rates provided in B.P.U. - N.J. No. 2, A5.2.1.C, at 32-34. (Documents 1 and 2 in my Exhibit.)

12. Even Dr. Taylor appears to concede that "residential toll" and "business toll" may be in separate markets. Taylor (BA-NJ), at 6. A more appropriate distinction may be between those customers for whom an ILEC's 1+ dialing advantage or other local service linkage (e.g., SELEX, IMC) may be important (residential, small business) vs. those customers who are able to make separate intraLATA toll purchase decisions irrespective of these ILEC ties (medium/large business and residential). That notwithstanding, what Dr. Taylor ignores is that the very reason why "business" toll (or some variant thereof) is a separate "market" from "residential" is directly related to the ability of these customers to separately purchase SELEX, IMC and other intraLATA toll services.

"opportunity costs" actually exist. End users perceive SELEX and IMC usage as "free" and will tend to make far greater use of these services than they would if confronted with per-minute toll type charges. BA–NJ incurs no "opportunity cost" of foregone access charge revenue in connection with this additional SELEX/IMC usage because it would never have realized such revenues had these calls been subject to toll-type pricing. If a BA–NJ SELEX customer were to use the entire 20 hours, BA-NJ would not "lose" 20 hours of access revenues; its cost would be limited to the incremental traffic-sensitive cost of providing this service. If, on the other hand, an IXC were to offer a flat-rated SELEX or IMC type service and its customer made the same 20 hours worth of calls, the IXC would be required to pay BA–NJ **[BEGIN BA–NJ PROPRIETARY]** $** **[END PROPRIETARY]** in access charges[13] under current rate levels, or **[BEGIN BA–NJ PROPRIETARY]** ** **[END BA–NJ PROPRIETARY]** the monthly SELEX rate, which could be as low as $1.97.

Imputation is far inferior to cost-based pricing of essential services as a safeguard against anticompetitive behavior

Q. WHILE IMPUTATION IS GENERALLY CONSIDERED TO BE A *NECESSARY* CONDITION TO LIMIT THE INCUMBENT'S ABILITY TO ENGAGE IN ANTICOMPETITIVE BEHAVIOR VIS-A-VIS COMPETITORS WHO REQUIRE ACCESS TO AND USE OF THE INCUMBENT'S BOTTLENECK SERVICES, IS IMPUTATION BY ITSELF *SUFFICIENT* TO PREVENT SUCH ANTICOMPETITIVE ACTS ON THE PART OF THE INCUMBENT?

A. No, it is not. An imputation requirement, if correctly implemented and applied, can work to prevent the incumbent from pricing its own retail services below the cost that an equally efficient competitor would incur in providing a comparable service. However, by itself an

13. Based upon the imputed **[BEGIN BA–NJ PROPRIETARY]** ** **[END BA–NJ PROPRIETARY]** access charge calculated in response to ATT-3.

imputation requirement does not limit the incumbent from establishing an excessive price for the essential service. In fact, as Dr. Taylor has readily conceded in the analysis offered in his Appendix, *if* the retail market were fully competitive such that the incumbent could not expect to obtain economic rents from its retail services in excess of those potentially available from the provision of the essential (access) service, then the incumbent would still be capable of pricing its bottleneck service (and of imputing that excessive price) at a level sufficient to maximize supracompetitive profits overall.

Q. HOW WOULD THAT CONFER AN ADVANTAGE UPON THE INCUMBENT — WOULDN'T IT THEN HAVE TO SET ITS RETAIL PRICES JUST AS HIGH AS WOULD ITS EQUALLY EFFICIENT COMPETITORS?

A. Yes, but in the context of the incumbent's history of market dominance and ubiquitous market presence, high access prices would tend to work to its advantage and to the detriment of its rivals. To see why, consider the following example. Suppose that BA-NJ's costs of switched access are 0.4 cents per minute and that its (non-access) costs of retail toll service are 3.0 cents. Suppose that a more efficient competitor's (non-access) costs of retail toll service are only 2.0 cents, or 33% less than those of the incumbent. If BA–NJ's *price* for access were set at the 0.4 cent cost, then the incumbent's total cost of retail toll (including imputed access) would be 3.4 cents per minute, whereas its more efficient rival's costs would be 2.4 cents, or about 30% less. The non-incumbent could then use that 30% cost advantage to overcome customer inertia (by charging a lower price than BA–NJ) and/or to retain as increased profits up to the 3.4 cent "least efficient provider" ceiling on a competitive market rate.[14] Now suppose that BA–NJ's profit-maximizing *price* for access were 10 cents rather than 0.4 cents, and that BA-NJ were permitted to charge that higher price for the essential access service. The incumbent's total "cost" (including imputed access charges) would then be 13 cents, as against 12 cents for its rival, a difference of about 8%. Not only would the *relative* price differential between the incumbent and the competitor be considerably less (8% vs. 30%), the higher price level overall would likely reduce overall demand for the service and therefore the potential size of the entrant's share of the market. This is not a problem for BA–NJ, since it will (at 10 cents per minute) be charging the profit-maximizing price for access. So while BA–NJ's overall profits will actually *rise* through the increase (to 10 cents) in the price of the essential (access) service,

14. In the presence of multiple more efficient providers, BA–NJ might not even be able to sustain a 3.4 cent price, and would be forced by the competitive market to itself become more efficient or face loss of market share.

its (more efficient) competitor will likely experience a potentially large drop-off in demand and in its profits overall.

Q. WHAT SHOULD BE DONE TO PREVENT THIS OUTCOME?

A. Prices for essential services, such as access to the ILEC's network, should be set at efficient, forward-looking economic cost, and this policy should be applied *in addition to* the imputation requirement. Specifically, the Board should modify its current access charge policies so that IXCs that offer calling plans equivalent to SELEX and IMC should be permitted to report intraLATA access usage separately for SELEX/IMC and other intraLATA toll, and should be charged the local switched call termination charge (per the Board's order) for SELEX/IMC usage.

IXCs offering comparable flat-rated calling plans similar to SELEX and IMC should be provided with cost-based or flat-rated access services in connection with these services.

Q. WHAT SPECIFIC ACTIONS SHOULD THE BOARD TAKE WITH RESPECT TO THE PRICING AND AVAILABILITY OF SELEX AND IMC SERVICES?

A. As a threshold matter, the imputation requirement must be satisfied separately for each discrete service offering. To the extent that SELEX and IMC fail to satisfy the Board's imputation requirement on a stand-alone basis, the Board has two policy alternatives:

(1) It can require that BA–NJ *increase* SELEX and IMC rates so that they will cover the imputed costs of access; or

(2) It can reduce the access charges that would apply were IXCs to offer SELEX and IMC services.

In my view and for the various reasons I have been discussing, I believe that the second alternative — reduction of access charges — is clearly the preferable solution and should be pursued. The first option — raising SELEX and IMC rates — would be unfair to consumers and would create an unwarranted windfall revenue increase for BA–NJ. Inasmuch as SELEX and IMC have never been priced at rate levels traditionally associated with "toll" services or capable of generating the amount of "contribution" to basic services that is customarily associated with toll and access services, it would be entirely inappropriate to subject these flat-rated services to access charges that are intended to produce toll-level contributions.

Q. WHAT WOULD BE INVOLVED IN IMPLEMENTING YOUR ALTERNATIVE (2) — REDUCING ACCESS CHARGES FOR IXC-HANDLED SELEX AND IMC CALLS?

A. Access charges associated with SELEX and IMC calls handled by IXCs should be set at forward-looking incremental cost without any "contribution" or other above-cost rate element. The Board could utilize, for this purpose, the local call termination charge established in the Local Competition Proceeding. IXCs would be required to report such usage separately from their other intraLATA usage, and would pay the local termination charges for such calls. BA–NJ currently applies different access charges in connection with access services furnished for use with (a) interstate interLATA toll; (b) intrastate interLATA toll; and (c) intrastate intraLATA toll, with the latter carrying the lowest per-minute charge.

Hence, there already exists the necessary administrative machinery to accommodate yet another access charge classification.

Q. WOULD THE SPECIFIC SOLUTION YOU ARE PROPOSING CREATE ANY ANTICOMPETITIVE DISADVANTAGE FOR BA–NJ?

A. No. BA–NJ would be able to satisfy its various imputation requirements separately for each service, and would be placed in the same position as its IXC competitors with respect to each category of intraLATA toll service. The only "disadvantage" that BA–NJ would suffer would be the loss of its ability to enforce a tying arrangement.

BA–NJ's policy of furnishing SELEX and IMC only to customers who select BA–NJ as their intraLATA PIC constitutes an anticompetitive (and *per se* illegal) tying arrangement and further supports applying the imputation rule to SELEX and IMC services.

Q. AT PAGE 10 OF HIS REBUTTAL TESTIMONY, DR. TAYLOR CONTENDS THAT BA–NJ'S POLICY OF LINKING SELEX AND IMC AVAILABILITY TO A CUSTOMER'S PRESUBSCRIPTION TO BA–NJ'S INTRALATA TOLL SERVICE IS NOT AN ANTICOMPETITIVE TYING ARRANGEMENT AS CONTENDED BY AT&T WITNESS MR. KIRCHBERGER. DO YOU AGREE?

A. No, I do not; Mr. Kirchberger's assessment is quite correct. BA–NJ's policy of furnishing SELEX and IMC only to customers who select BA–NJ as their intraLATA PIC could not be a more clear-cut case of an anticompetitive (and *per se* illegal) classic tying arrangement. From an economic and antitrust standpoint, a "tying arrangement" exists where customers are required to purchase product "A" (in this case, presubscribe to BA–NJ's competitive intraLATA toll service) as a condition for the ability to purchase or obtain product "B" (SELEX and IMC service) and where other competing suppliers are foreclosed from selling

the tied commodity (in this case, IMC and SELEX services) to that customer.[15] The practice of bundling products or services together is directly related to the concept of tying arrangements.[16]

Q. DR. SELWYN, THE US SUPREME COURT, IN *JEFFERSON PARISH HOSPITAL*, HAS ARTICULATED THREE CRITERIA FROM WHICH THE *PER SE* ILLEGALITY OF TYING ARRANGEMENTS CAN BE INFERRED: (1) THE TYING AND TIED PRODUCTS HAVE TO BE DISTINCT; (2) THE FIRM TYING THE PRODUCTS HAS TO HAVE SUFFICIENT POWER IN THE TYING GOOD MARKET TO FORCE THE PURCHASE OF THE TIED GOOD; AND (3) THE TYING AGREEMENT MUST FORECLOSE A SUBSTANTIAL VOLUME OF TRADE OR HAVE THE POTENTIAL TO DO SO.[17] DOES THE SPECIFIC TYING ARRANGEMENT IMPOSED BY BA–NJ WITH RESPECT TO SELEX/IMC AND INTRALATA PRESUBSCRIPTION SATISFY THESE CRITERIA?

A. Yes, it satisfies all three of them:

(1) The three services are separate and distinct from one another both as to how they are perceived by customers and as to the specific manner in which they are treated in BA–NJ's tariffs. Moreover, those business and residential customers with premises equipment (e.g., PBXs) capable of screening for and generating 101XXXX access codes on non-local, non-SELEX, non-IMC intraLATA toll calls are entirely capable of making separate purchase decisions with respect to each of these services.

15. See, e.g., F.M. Scherer and David Ross, *Industrial Market Structure and Economic Performance*, Third Edition (Houghton Mifflin Co. 1990), p. 565.

16. *Id*.

17. *Jefferson Parish Hospital District No. 2 et al. v. Hyde*, 466 US 2, 15-18 (1984).

(2) BA–NJ wields substantial and unchallenged market power in the *tying* products — SELEX and IMC — due to (a) its near-100% control of the New Jersey basic local exchange market (within its operating areas) with which both SELEX and IMC are closely and historically linked, and (b) its near-100% control of the essential switched access service without which no competing provider could furnish SELEX or IMC services.

(3) The specific tying arrangement — the requirement that customers presubscribe to BA–NJ intraLATA toll service as a condition for obtaining SELEX and/or IMC — effectively forecloses the ability of competing IXCs to sell intraLATA toll services to the approximately **[BEGIN BA–NJ PROPRIETARY] ** [END BA–NJ PROPRIETARY]** BA-NJ customers who currently subscribe to SELEX service[18] or to the approximately **[BEGIN BA–NJ PROPRIETARY] ** [END BA–NJ PROPRIETARY]** BA–NJ customers who subscribe to IMC service,[19] as well as any future BA–NJ customers who would subscribe to SELEX and IMC services.

Q. EVEN IF THESE CRITERIA WERE NOT SATISFIED ACCORDING TO THE STRICT LEGAL ANTITRUST STANDARD AS SET FORTH BY THE US SUPREME COURT, WOULD THE SPECIFIC LINKAGE THAT BA–NJ HAS CREATED AS BETWEEN ITS INTRALATA TOLL AND SELEX/IMC NEVERTHELESS BE ANTICOMPETITIVE?

18. BA-NJ Response to AT&T Data Request ATT-29. (Document 3 in my Exhibit.)

19. BA-NJ Response to AT&T Data Requests 29 and 112. (Documents 3 and 4 in my Exhibit).

A. Yes, there is no question but that a tying arrangement such as that being imposed by BA–NJ is anticompetitive both by its nature and by its design.

Q. WHY DO YOU BELIEVE THAT BA–NJ'S TYING ARRANGEMENT IS ANTICOMPETITIVE BY NATURE AND BY DESIGN?

A. This Board has taken specific actions to open the intraLATA toll market to competition and it is an achievable goal. That effective and sustainable competition in the intraLATA toll market is possible can be readily demonstrated by the highly competitive conditions that prevail in the *inter*LATA market. Notwithstanding the public policy decision that the intraLATA market is competitive, BA–NJ continues to control the overwhelming share of this market. Yet the only substantive difference between the highly competitive interLATA market and the noncompetitive intraLATA market can be directly linked to the total exclusion from the interLATA segment of Bell Operating Companies such as BA–NJ.[20]

Prior to presubscription, customers desiring to purchase intraLATA toll services from a provider other than BA–NJ were required to dial a five-digit "access code" ("10XXX") together with the called number on each call. All intraLATA calls made without using an access code were automatically routed to, and were thus carried by, BA–NJ.

20. This prohibition was established in the *Modification of Final Judgment* under which the former Bell System was broken up, and is now a statutory requirement under Sections 271 and 272 of TA96. (United States v American Tel. & Tel. Co., 552 F. Supp. 131, 226,227 (D.D.C 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983).)

This enormous dialing advantage, coupled with the specific local and toll dialing protocols extant in New Jersey (under which there is no obvious distinction between a "local" and a toll call or, in the case of the '609' NPA, between an intraLATA and an interLATA call), prevented the IXCs from attaining any consequential market penetration in the New Jersey intraLATA toll market. The introduction of presubscription eliminated BA–NJ's dialing advantage by allowing customers to designate carriers other than BA–NJ to carry intraLATA calls on a 7-digit or 1+10-digit basis. Concurrent with the implementation of intraLATA presubscription, the Board approved certain other tariff changes authorizing BA–NJ to require its SELEX and IMC customers to select BA–NJ as their intraLATA PIC,[21] and immediately thereafter BA-NJ informed its SELEX customers that it would no longer provide these services to them if they selected a PIC other than BA–NJ for intraLATA calling.[22] BA-NJ thus replaced its preexisting dialing advantage with the tying arrangement that worked to effectively discourage SELEX and IMC customers from switching intraLATA toll providers and thereby foreclosed this important segment of the intraLATA toll market to competing IXCs.

Moreover, as demonstrated by BA-NJ's responses to ATT DRs 1-3, **[BEGIN BA–NJ PROPRIETARY]** **; **[END BA–NJ PROPRIETARY]** indeed, the profit level from these services is more than sufficient to fund the deliberate *below-imputed cost* pricing of SELEX and IMC, the services to which intraLATA presubscription is "tied."[23]

21. *Filing by Bell Atlantic - New Jersey, Inc. to Revise Tariff B.P.U. N.J. No. 2, Exchange and Network Services, Relating to BA-NJ's Toll Calling,* Docket No. TT97040227.

22. See, e.g., May 1, 1997 letter signed by Eleanor Schollmeyer, provided in response to AT&T Data Request No. ATT-10.

23. BA-NJ Responses to AT&T Data Requests ATT-1 through ATT-7. (Documents 5-11 in my Exhibit.)

In short, BA–NJ's tying arrangement provides it with the opportunity to continue to earn supracompetitive profits from toll services that are offered in a marketplace that has been determined to be competitive and that is demonstrably capable of supporting multiple providers absent such anticompetitive tactics by the dominant incumbent. BA–NJ is then able to use a portion of these supracompetitive profits to finance its below-imputed cost pricing of the tying service (SELEX/IMC), thereby sustaining indefinitely the anticompetitive scheme.

Q. WHAT IS THE BASIS FOR DR. TAYLOR'S CONCLUSION THAT THERE IS NO ANTICOMPETITIVE TYING ARRANGEMENT HERE?

A. Dr. Taylor's conclusion appears to be based upon a definitional tautology and circular reasoning. Dr. Taylor's reasoning is that "tying involves requiring customers to take a competitive service from BA–NJ, if they wanted to continue using BA–NJ's monopoly service."[24] He then *declares* that SELEX and IMC are toll services (because BA–NJ says that they are) and, since toll services are by definition not monopoly services, there is no coercion; and finally, since there is no coercion, there is no tying.

Q. WHY IS DR. TAYLOR'S REASONING CIRCULAR?

A. As I will address in more detail below, SELEX and IMC are effectively stand-alone *de facto* monopoly service offerings by BA-NJ. When SELEX and IMC are viewed in this perspective, Dr. Taylor's argument that there is no coercion and therefore no tying totally

24. Taylor (BA-NJ), at 10.

breaks down. Dr. Taylor's claim that SELEX and IMC plans are not stand-alone services is not rooted in antitrust principles or linked to the Supreme Court's tests, but is instead based entirely upon how these services are defined by BA–NJ itself: "The SELEX and IMC plans are not services ... because BA–NJ does not offer SELEX as a separate service. It must be bought as part of a customer's intraLATA toll service"[25] This definition (it's not a separate service because I say it isn't) is clearly tautological and circular. The standard must be applied *objectively* and not in terms of self-serving designations and descriptions proffered by the perpetrator of the tying arrangement itself.

Consider, for example, the classic tying arrangement that was shut down by the United States Justice Department in its 1956 Consent Decree with Eastman Kodak. At that time, Kodak dominated the color film market, and only sold its film bundled together with processing, thereby foreclosing competition in the color film processing market. In defending its position (prior to the settlement), Kodak had contended that the "product" consisted of *processed film*, that there was no "tying" because the company was only selling one product.[26] Justice did not accept that characterization, and under the terms of the Consent Decree, Kodak was prohibited from bundling film with processing on sales made within the United States.[27] The fact that BA–NJ may wish to group SELEX and IMC with its

25. Taylor (BA-NJ), at 2.

26. *U.S. v. Eastman Kodak Co.*, CCH 1954 Trade Cases, Para. 67,920; CCH 1961 Trade Cases, Para. 70,100.

27. *Id.* Note that Kodak's effective monopoly in the color film market did not arise from any legally protected franchise. Nevertheless, this *de facto* monopoly provided it with the means to control the adjacent film processing business via tying. More recently, the Department of Justice has advanced analogous arguments with respect to Microsoft's inclusion of a "free" Internet browser with its Windows 95/98 software. While SELEX and IMC are theoretically

overall "toll service" does not "prove" that no tying requirement is operative. Similarly, Dr. Taylor's claim that "[i]f BA–NJ had monopoly power over SELEX or IMC, it would not have to charge such low rates,"[28] is also circular: As I have already noted, the very existence of the tying arrangement works to perpetuate supracompetitive profits for BA–NJ's toll services which in turn enables BA–NJ to underprice SELEX and IMC, which in turn enables BA–NJ to coerce customers into selecting BA–NJ as their intraLATA PIC.

Q. DO BA–NJ'S CUSTOMERS PERCEIVE SELEX AND IMC AS PART OF THEIR INTRALATA TOLL SERVICE "PLAN," AS BA–NJ AND DR. TAYLOR CONTEND?

A. No, they do not. Customer perception as well as the historical treatment of these services in BA–NJ's (and its predecessor New Jersey Bell's) tariffs make clear distinctions between SELEX and IMC, on the one hand, and other intraLATA toll services that are subject to by-the-call usage-based charges, on the other. Until BA–NJ affirmatively notified its customers in May, 1997 that BA-NJ now considers SELEX to be part of the customer's intraLATA toll plan, these flat-rated (in the case of residential customers) or bulk-billed (in the case of business customers) services had been clearly distinguished from one another and from other intraLATA toll services. In fact, BA–NJ's tariffs have traditionally linked SELEX and IMC specifically to BA–NJ's *local* exchange service; for example, the General Regulations of BA-NJ's currently effective Exchange Services tariff define SELEX as "an optional

(..continued)
competitive, entry is all but foreclosed as an economic matter by BA–NJ's ability to price these services below imputed cost.

28. Taylor (BA-NJ), at 10.

offering which extends the local service area for certain exchange areas."[29] The currently effective SELEX tariff itself states that SELEX "is furnished only in connection with local exchange service."[30] Prior to May 5, 1997, BA–NJ customers were never called upon to make any affirmative choice among intraLATA toll plans or carriers, and thus were never made to think of SELEX and IMC as being part of BA–NJ's "toll" service in the first place.

Q. IS THERE ANYTHING PARTICULARLY UNUSUAL ABOUT THE SPECIFIC TYING ARRANGEMENT THAT BA–NJ SEEKS TO ENFORCE WITH RESPECT TO SELEX AND IMC?

A. Yes. As we have previously discussed, in a classic tying arrangement, the customer is forced to purchase the competitive product "A" as a condition for the ability to purchase or acquire the monopolized product "B". In the instant situation, the customer is only being required to presubscribe for the competitive product (BA–NJ intraLATA toll service), but is not being compelled to purchase any specified quantity of that service. However, pre-subscribing to BA–NJ intraLATA toll all but eliminates the likelihood that, if the customer does make intraLATA toll calls beyond the SELEX/IMC calling areas, those calls will be purchased from a provider *other* than BA–NJ. In effect, the specific tying that BA–NJ is imposing is not a requirement to purchase (intraLATA toll) service from BA–NJ, but rather a requirement that intraLATA toll service *not be purchased from anyone else*. The effect of this policy is a restraint of trade, effectively blocking providers other than BA–NJ from access to BA–NJ's monopoly local service customers.

29. B.P.U. - N.J. No. 2, A5.2.1.B, 3d Rev. Pg. 29 (March 9, 1993).

30. B.P.U. - N.J. No. 2, A6.3.2.B, 7th Rev. Pg. 18 (Dec. 6, 1997).

Q. WHY SHOULD SELEX AND IMC BE CATEGORIZED AS MONOPOLY SERVICES?

A. First, SELEX and IMC share key characteristics with local monopoly services, including that:

- For most BA–NJ residential customers, local service is furnished on a flat-rate basis. Like their "local" calls, SELEX service is also (effectively) flat-rated,[31] and IMC calls are flat rated; by contrast, toll calls (interstate, intrastate and intraLATA) are billed by-the-call, typically on the basis of duration, distance and time-of-day.

- The overall rate level applicable to SELEX is far more closely aligned with that customarily applied for local calls than for MTS calls and, like basic monthly exchange rates, SELEX rates appear to be based in part upon the number of main telephone lines that can be reached on a local (SELEX) basis.

- Like local calls, SELEX and IMC calls are not itemized on the customer's bill; full call detail is provided for all (other) toll calls.

- SELEX has historically been treated as an "extended local calling" service and not as a "toll" service, and IMC (which is a non-optional element of local service in exchanges

31. According to BA-NJ's response to ATT-32, only **[BEGIN BA–NJ PROPRIETARY]** ** **[END BA–NJ PROPRIETARY]** of residential SELEX customers exceed the 20 hours per month SELEX calling allowance.

in which a toll route would otherwise exist within the same municipality) was expressly characterized as "local" service when it was initially adopted by the Board in 1989.[32]

Second, there is no indication that SELEX rate levels had ever been, or are now, set so as to generate the same level of revenue, in the aggregate, that would have been generated by those same calls had they been subject to toll rate treatment. Indeed, by virtue of the fact that **[BEGIN BA–NJ PROPRIETARY]** **[33] **[END BA–NJ PROPRIETARY]** it is clear that SELEX does not now, and that it never did, provide the same level of contribution as is customarily generated by MTS or by access services furnished to IXCs.

Q. DOES BA–NJ PROVIDE A CREDIT OR OTHERWISE REDUCE A CUSTOMER'S MONTHLY *LOCAL* SERVICE BILL WHEN IT DISCONTINUES PROVIDING IMC TO A LOCAL SERVICE CUSTOMER WHO SELECTS A CARRIER OTHER THAN BA–NJ AS THE INTRALATA TOLL PIC?

A. No, it doesn't. Even though IMC is provided on a bundled, non-optional basis in any exchange in which a toll charge would otherwise apply for calls within the same municipality, BA–NJ does not provide any credit or reduction in rate if it ceases providing IMC to a customer who presubscribes to an IXC for intraLATA toll calling. Here BA–NJ, pursuant to an explicit order issued by this Board, furnishes IMC on a non-optional basis to qualifying local service customers but only where such customers choose BA–NJ as their intraLATA toll PIC. IMC cannot at the same time be a "toll" service, as BA–NJ and Dr.

32. *Filing by New Jersey Bell Telephone Company of a Revision of Tariff B.P.U. - N.J. No. 2, Providing for the Elimination of IntraLATA Intramunicipal Toll Charges*, Docket No. TT89020148 (March 23, 1989), at 2.

33.

Taylor contend, yet be bundled into the local service rate on a non-optional basis. Such a policy clearly ties competitive intraLATA toll to *de facto* monopoly local service in an anticompetitive manner.

Q. IS THIS ALSO TRUE FOR BUSINESS CUSTOMERS WHO PAY FOR IMC CALLS ON A MESSAGE UNIT BASIS?

A. Yes. As with residential service, BA–NJ does not provide any credit or decrease in local rate to business IMC — and SELEX — customers selecting an IXC as their intraLATA PIC. However, in the case of business customers whose usage falls below the monthly 75-MU call allowance, BA–NJ also makes no adjustment for unused MUs that would otherwise have been used to place IMC or SELEX calls.

Q. PLEASE EXPLAIN THIS LAST POINT.

A. Suppose that a particular business subscriber has one line and thus receives a 75-MU monthly calling allowance. Suppose, however, that only 40 of those Mus are used to place calls to numbers within the customer's primary local calling area, and that the remaining 35 are used to place SELEX and IMC calls. The customer would pay only the basic monthly charge; no additional message unit or other usage charges would apply. Now suppose that the customer presubscribes for an IXC's intraLATA service and so BA–NJ discontinues that customer's SELEX and IMC. Now, even if the IXC were to match the 6.5 cents per five minutes or fraction MU charge for calls that would be subject to IMC or SELEX treatment if furnished by BA–NJ, the customer in this case would not be able to use any portion of the

(..continued)

BA–NJ monthly calling allowance to "pay" the IXC for those calls. Thus result is a net increase in the customer's total bill, even where the rates themselves are exactly the same.

Conclusion

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND THE SPECIFIC RECOMMENDATIONS YOU ARE OFFERING TO THE BOARD WITH RESPECT TO THE TREATMENT OF SELEX AND IMC.

A. I recommend that the Board make the following specific findings with respect to these services and the application of its imputation standard:

- The Board's imputation requirement must be satisfied with respect to each category of toll service; BA–NJ should not be permitted to combine SELEX and IMC with its other intraLATA toll services for purposes of applying the imputation test.

- SELEX and IMC services are perceived by customers as being distinct, are offered under different and unique service or brand names, are separately priced, are separately treated for billing purposes, and are in some cases subject to separate purchase decisions by their customers. For any or all of these reasons, SELEX and IMC must be treated as separate services for purposes of satisfying the Board's imputation requirements.

- It is BA–NJ's practice of applying the imputation standard across all "toll" services combined that is anticompetitive.

- In view of the similarity between SELEX and IMC services and local services coupled with the fact that neither has ever been relied upon as a source of support for basic residential access, BA–NJ should be required to adopt "local" cost-based access charges for these services that eliminate all above-cost "contribution" elements.

- It is an unreasonable discrimination to require that competing IXCs pay access charges that incorporate such above-cost contributions while BA–NJ's own retail services (SELEX and IMC) are not required to make equivalent contributions.

- The BPU should modify its access charge policies so that IXCs who offer calling plans equivalent to SELEX and IMC should be permitted to report intraLATA access usage separately for SELEX/IMC and other intraLATA toll, and should be charged the local switched call termination charge (per Board order or applicable Interconnection Agreement) for SELEX/IMC usage.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes, it does.

Appendix 1

Statement of Qualifications

DR. LEE L. SELWYN

Dr. Lee L. Selwyn has been actively involved in the field of public utility regulation for more than thirty years, and is an internationally recognized authority on telecommunications regulation, economics and public policy. Dr. Selwyn founded the firm of Economics and Technology, Inc. in 1972, and has served as its President since that date. He received his Ph.D. degree from the Alfred P. Sloan School of Management at the Massachusetts Institute of Technology. He also holds a Master of Science degree in Industrial Management from MIT and a Bachelor of Arts degree with honors in Economics from Queens College of the City University of New York.

Dr. Selwyn has testified as an expert on rate design, service cost analysis, form of regulation, and other telecommunications policy issues in telecommunications regulatory proceedings before some forty state commissions, the Federal Communications Commission and the Canadian Radio-television and Telecommunications Commission, among others. He has appeared as a witness on behalf of commercial organizations, non-profit institutions, as well as local, state and federal government authorities responsible for telecommunications regulation and consumer advocacy.

He has served or is now serving as a consultant to numerous state utilities commissions including those in Arizona, Minnesota, Kansas, Kentucky, the District of Columbia, Connecticut, California, Delaware, Idaho, Maine, Massachusetts, New Hampshire, Vermont, New Mexico, Wisconsin and Washington State, the Office of Telecommunications Policy (Executive Office of the President), the National Telecommunications and Information Administration, the Federal Communications Commission, the Canadian Radio-television and Telecommunications Commission, the United Kingdom Office of Telecommunications, and the Secretaria de Comunicaciones y Transportes of the Republic of Mexico. He has also served as an advisor on telecommunications regulatory matters to the International Communications Association and the Ad Hoc Telecommunications Users Committee, as well as to a number of major corporate telecommunications users, information services providers, paging and cellular carriers, and specialized access services carriers.

Dr. Selwyn has presented testimony as an invited witness before the U.S. House of Representatives Subcommittee on Telecommunications, Consumer Protection and Finance, the U.S. Senate Judiciary Committee, and the U.S. Senate Commerce Committee, on subjects dealing with restructuring and deregulation of portions of the telecommunications industry.

In 1970, he was awarded a Post-Doctoral Research Grant in Public Utility Economics under a program sponsored by the American Telephone and Telegraph Company, to conduct research on the economic effects of telephone rate structures upon the computer time sharing industry. This work was conducted at Harvard University's Program on Technology and Society, where he was appointed as a Research Associate. Dr. Selwyn was also a member of the faculty at the College of Business Administration at Boston University from 1968 until 1973, where he taught courses in economics, finance and management information systems.

In addition to his extensive work in the telecommunications field, Dr. Selwyn has also participated in several proceedings in the US and Canada involving regulatory reform of local gas distribution utilities.

Dr. Selwyn has published numerous papers and articles in professional and trade journals on the subject of telecommunications service regulation, cost methodology, rate design and pricing policy. These have included:

"Taxes, Corporate Financial Policy and Return to Investors"
National Tax Journal, Vol. XX, No.4, December 1967.

"Pricing Telephone Terminal Equipment Under Competition"
Public Utilities Fortnightly, December 8, 1977.

"Deregulation, Competition, and Regulatory Responsibility in the Telecommunications Industry"
Presented at the 1979 Rate Symposium on Problems of Regulated Industries — Sponsored by: The American University, Foster Associates, Inc., Missouri Public Service Commission, University of Missouri-Columbia, Kansas City, MO, February 11-14, 1979.

"Sifting Out the Economic Costs of Terminal Equipment Services"
Telephone Engineer and Management, October 15, 1979.

"Usage-Sensitive Pricing" (with G. F. Borton)
(a three part series)
Telephony, January 7, 28, February 11, 1980.

"Perspectives on Usage-Sensitive Pricing"
Public Utilities Fortnightly, May 7, 1981.

"Diversification, Deregulation, and Increased Uncertainty in the Public Utility Industries"
Comments Presented at the Thirteenth Annual Conference of the Institute of Public Utilities, Williamsburg, VA — December 14-16, 1981.

"Local Telephone Pricing: Is There a Better Way?; The Costs of LMS Exceed its Benefits: a Report on Recent U.S. Experience."
Proceedings of a conference held at Montreal, Quebec — Sponsored by Canadian Radio-Television and Telecommunications Commission and The Centre for the Study of Regulated Industries, McGill University, May 2-4, 1984.

"Long-Run Regulation of AT&T: A Key Element of A Competitive Telecommunications Policy"
Telematics, August 1984.

"Is Equal Access an Adequate Justification for Removing Restrictions on BOC Diversification?"
Presented at the Institute of Public Utilities Eighteenth Annual Conference, Williamsburg, VA — December 8-10, 1986.

"Market Power and Competition Under an Equal Access Environment"
Presented at the Sixteenth Annual Conference, "Impact of Deregulation and Market Forces on Public Utilities: The Future Role of Regulation"
Institute of Public Utilities, Michigan State University, Williamsburg, VA — December 3-5, 1987.

"Contestable Markets: Theory vs. Fact"
Presented at the Conference on Current Issues in Telephone Regulations: Dominance and Cost Allocation in Interexchange Markets — Center for Legal and Regulatory Studies Department of Management Science and Information Systems — Graduate School of Business, University of Texas at Austin, October 5, 1987.

"The Sources and Exercise of Market Power in the Market for Interexchange Telecommunications Services"
Presented at the Nineteenth Annual Conference — "Alternatives to Traditional Regulation: Options for Reform" — Institute of Public Utilities, Michigan State University, Williamsburg, VA, December, 1987.

"Assessing Market Power and Competition in The Telecommunications Industry: Toward an Empirical Foundation for Regulatory Reform"
Federal Communications Law Journal, Vol. 40 Num. 2, April 1988.

"A Perspective on Price Caps as a Substitute for Traditional Revenue Requirements Regulation"
Presented at the Twentieth Annual Conference — "New Regulatory Concepts, Issues and Controversies" — Institute of Public Utilities, Michigan State University, Williamsburg, VA, December, 1988.

"The Sustainability of Competition in Light of New Technologies" (with D. N. Townsend and P. D. Kravtin)
Presented at the Twentieth Annual Conference — Institute of Public Utilities Michigan State University, Williamsburg, VA, December, 1988.

"Adapting Telecom Regulation to Industry Change: Promoting Development Without Compromising Ratepayer Protection" (with S. C. Lundquist)
IEEE Communications Magazine, January, 1989.

"The Role of Cost Based Pricing of Telecommunications Services in the Age of Technology and Competition"
Presented at National Regulatory Research Institute Conference, Seattle, July 20, 1990.

"A Public Good/Private Good Framework for Identifying POTS Objectives for the Public Switched Network" (with Patricia D. Kravtin and Paul S. Keller)
Columbus, Ohio: *National Regulatory Research Institute*, September 1991.

"Telecommunications Regulation and Infrastructure Development: Alternative Models for the Public/Private Partnership"
Prepared for the Economic Symposium of the International Telecommunications Union Europe Telecom '92 Conference, Budapest, Hungary, October 15, 1992.

"Efficient Infrastructure Development and the Local Telephone Company's Role in Competitive Industry Environment" *Presented at the Twenty-Fourth Annual Conference, Institute of Public Utilities, Graduate School of Business, Michigan State University, "Shifting Boundaries between Regulation and Competition in Telecommunications and Energy"*, Williamsburg, VA, December 1992.

"Measurement of Telecommunications Productivity: Methods, Applications and Limitations" (with Françoise M. Clottes)

Presented at Organisation for Economic Cooperation and Development, Working Party on Telecommunication and Information Services Policies, `93 Conference "Defining Performance Indicators for Competitive Telecommunications Markets", Paris, France, February 8-9, 1993.

"Telecommunications Investment and Economic Development: Achieving efficiency and balance among competing public policy and stakeholder interests"
Presented at the 105th Annual Convention and Regulatory Symposium, National Association of Regulatory Utility Commissioners, New York, November 18, 1993.

"The Potential for Competition in the Market for Local Telephone Services" (with David N. Townsend and Paul S. Keller)
Presented at the Organization for Economic Cooperation and Development Workshop on Telecommunication Infrastructure Competition, December 6-7, 1993.

"Market Failure in Open Telecommunications Networks: Defining the new natural monopoly," *Utilities Policy*, Vol. 4, No. 1, January 1994.

"The Enduring Local Bottleneck: Monopoly Power and the Local Exchange Carriers," (with Susan M. Gately, et al) a report prepared by ETI and Hatfield Associates, Inc. for AT&T, MCI and CompTel, February 1994.

"Commercially Feasible Resale of Local Telecommunications Services: An Essential Step in the Transition to Effective Local Competition," (Susan M. Gately, et al) a report prepared by ETI for AT&T, July 1995.

"Efficient Public Investment in Telecommunications Infrastructure"
Land Economics, Vol 71, No.3, August 1995.

"Market Failure in Open Telecommunications Networks: Defining the new natural monopoly," in *Networks, Infrastructure, and the New Task for Regulation*, by Werner Sichel and Donald L. Alexander, eds., University of Michigan Press, 1996.

Dr. Selwyn has been an invited speaker at numerous seminars and conferences on telecommunications regulation and policy, including meetings and workshops sponsored by the National Telecommunications and Information Administration, the National Association of Regulatory Utility Commissioners, the U.S. General Services Administration, the Institute of Public Utilities at Michigan State University, the National Regulatory Research Institute at Ohio State University, the Harvard University Program on Information Resources Policy, the Columbia University Institute for Tele-Information, the International Communications Association, the Tele-

Communications Association, the Western Conference of Public Service Commissioners, at the New England, Mid-America, Southern and Western regional PUC/PSC conferences, as well as at numerous conferences and workshops sponsored by individual regulatory agencies.

Before the

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

In the Matter of Petition of AT&T Communications of New Jersey, Inc. for Determination of Compliance By Bell Atlantic–New Jersey, Inc.'s Selective Calling and Intramunicipal Calling Services with Imputation Requirements	BPU Docket No. TO97100808 OAL Docket No. PUCOT 11326-97N

Exhibit accompanying the Rebuttal Testimony

of

LEE L. SELWYN

on behalf of

AT&T Communications of New Jersey, Inc.
MCI Telecommunications Corporation

PROPRIETARY MATERIAL HAS BEEN REDACTED

August 31, 1998

DOCUMENTS 3 THROUGH 11 CONTAIN ALLEGEDLY PROPRIETARY MATERIAL

**THIS DOCUMENT CONTAINS
ALLEGEDLY PROPRIETARY MATERIAL**

Attachment 3

Information from the Verizon Wireless website regarding family wireless plans

verizonwireless
We never stop working for you.®

You are shopping in
Boston, MA 02108
Change Zip Code

Promotional America's Choice℠ Family SharePlan℠

A great value for you and your family.

- Activate a primary line of service and add up to 3 additional lines for a monthly access of $20 each.
- The primary plan's Monthly Home Airtime Allowance determines how many minutes the group will share. <

Choose your Family SharePlan and the number of lines, then select "Continue Order." The next screen will offer you phone options.

America's Choice Map
National Enhanced Services Map

Free Shipping >>

Steps to Checkout

1 : Select plan
2 : Select phone
3 : Select accessories
4 : Select additional features/services
5 : Preview order and checkout

Promotional America's Choice℠ Family SharePlan℠ 300 Select 0 Lines

Plan Choices	Monthly Access	Monthly Airtime Allowance (in minutes)	Per Minute Rate after allowance	Promotion
Primary Line	$34.99	300 Shared Airtime Minutes	$0.40	**Unlimited Shared Nights & Weekends**
2nd Line	$20	Shared Airtime Minutes	$0.45	Shared

Promotional America's Choice℠ Family SharePlan℠ 400 Select 0 Lines

Plan Choices	Monthly Access	Monthly Airtime Allowance (in minutes)	Per Minute Rate after allowance	Promotion
Primary Line	$39.99	400 Shared Airtime Minutes	$0.45	Unlimited Family Calling and Unlimited Night & Weekend Airtime Minutes
2nd Line	$20	Shared Airtime Minutes	$0.45	

Promotional America's Choice℠ Family SharePlan℠ 500 Select 0 Lines

Plan Choices	Monthly Access	Monthly Airtime Allowance (in minutes)	Per Minute Rate after allowance	Promotion
Primary Line	$49.99	500 Shared Airtime Minutes	$0.40	Unlimited Family Calling and Unlimited Night & Weekend Airtime Minutes
2nd Line	$20	Shared Airtime Minutes	$0.45	

Promotional America's Choice℠ Family SharePlan℠ 700 Select 0 Lines

Plan Choices	Monthly Access	Monthly Airtime Allowance (in minutes)	Per Minute Rate after allowance	Promotion
Primary Line	$59.99	700 Shared Airtime Minutes	$0.40	Unlimited Family Calling and Unlimited Night & Weekend Airtime Minutes **PLUS100** Shared Bonus Minutes
2nd Line	$20	Shared Airtime Minutes	$0.45	

Promotional America's Choice℠ Family SharePlan℠ 1000 Select 0 Lines

Plan Choices	Monthly Access	Monthly Airtime Allowance (in minutes)	Per Minute Rate after allowance	Promotion
Primary Line	$79.99	1000 Shared Airtime Minutes	$0.35	Unlimited Family Calling and Unlimited Night & Weekend Airtime Minutes **PLUS100** Shared Bonus Minutes
2nd Line	$20	Shared Airtime Minutes	$0.45	

Promotional America's Choice℠ Family SharePlan℠ 1300 Select 0 Lines

Plan Choices	Monthly Access	Monthly Airtime Allowance (in minutes)	Per Minute Rate after allowance	Promotion
Primary Line	$99.99	1300 Shared Airtime Minutes	$0.25	Unlimited Family Calling and Unlimited Night & Weekend Airtime Minutes **PLUS 200** Shared Bonus Minutes
2nd Line	$20	Shared Airtime Minutes	$0.45	

Promotional America's Choice℠ Family SharePlan℠ 2200 Select 0 Lines

Plan Choices	Monthly Access	Monthly Airtime Allowance (in minutes)	Per Minute Rate after allowance	Promotion
Primary Line	$149.99	2200 Shared Airtime Minutes	$0.25	Unlimited Family Calling and Unlimited Night & Weekend Airtime Minutes **PLUS 200** Shared Bonus Minutes
2nd Line	$20	Shared Airtime Minutes	$0.45	

Promotional America's Choice℠ Family SharePlan℠ 3200 Select 0 Lines

Plan Choices	Monthly Access	Monthly Airtime Allowance (in minutes)	Per Minute Rate after allowance	Promotion
Primary Line	$199.99	3200 Shared Airtime Minutes	$0.20	Unlimited Family Calling and Unlimited Night & Weekend Airtime Minutes **PLUS 200** Shared Bonus Minutes
2nd Line	$20	Shared Airtime Minutes	$0.45	

Domestic long distance is included (airtime charges apply). Domestic roaming is 69" / minute. CDMA tri-mode phone with specific software and preferred roaming list required. No activation fee for two-year agreements. $35 activation fee per line on one-year agreements. One- or two-year agreement required. $175 early termination fee applies to each line. Long distance and roaming rates for international calls where available will vary. Not all plans and services are available in all areas.

Night hours are 9:01 p.m. - 5:59 a.m. Monday night through Friday morning; 12:00 a.m. - 5:59 a.m. Monday morning; 9:01 p.m. - 11:59 p.m. Friday night. Weekend hours are 12:00 a.m. Saturday - 11:59 p.m. Sunday. Night & Weekend Minutes are Home Airtime Minutes

CLEAR ORDER CONTINUE ORDER >

IMPORTANT CUSTOMER INFORMATION:
Taxes & surcharges apply & may vary. Federal Universal Service Charge of 1.90%
(varies quarterly based on FCC rate) and a 5c Regulatory Charge per line/month are our charges, not taxes. With promotion, monthly allowance minutes may apply to peak airtime only. Not available in all markets. Limited time offer. If you select a plan or promotion that is not available in your area, you will be notified by us by e-mail of alternative plans and offers available to you.

America's Choice Roaming Indicator: When your phone's roaming indicator light is off and/or the banner display reads "Verizon Wireless Network", America's Choice home airtime rates apply. Digital features and services, including national mobile to mobile, are available when your digital indicator is on.

When the roaming indicator light is flashing and/or the banner display reads "Extended Network", America's Choice home airtime rates still apply. National mobile to mobile and some other features and services may not be available.

When the roaming indicator light is solid and/or the banner display reads "Roaming", roaming rates apply. National mobile to mobile and other features and services may not be available.

America s Choice plans only available with certain CDMA digital tri-mode equipment with specific software. May operate in digital, PCS digital and analog modes. Rates based on use of phone as programmed by Verizon Wireless. Your phone software may be changed over the air without notice.

Calls must be placed on the America s Choice network. Geographic and other restrictions apply. Rates do not apply to credit card or operator assisted calls, which may be required in certain areas. Airtime is rounded to the next full minute, so actual allowance may vary. Unused airtime minutes are lost. Charges for calls that connect begin when you press SEND while placing a call, or upon connection to the system. On incoming calls, charges may begin prior to the phone ringing and before you press SEND to receive the call. Charges end when the call disconnects from the system, which may be a few seconds after you press END . Calls to certain fax/data modems incur charges, though it may sound as if the call was unanswered. Airtime is charged on calls to toll-free numbers.

There may be times when you are roaming on another carrier s network. The billing for roaming minutes used on another carrier s network and related long distance charges (if applicable) may be delayed depending on when Verizon Wireless is billed by the other carrier. These roaming minutes may be applied against your monthly airtime allowance in the month they appear on your bill and not during the month of usage and may result in phone charges in addition to your monthly access charge. Automatic roaming may not be available in all areas.

Only one user can be on a primary plan and the other(s) must be on a secondary line. All lines must be activated on the same billing account. All lines on the account will share Monthly Allowance Minutes of primary plan. In some markets, Monthly Home Airtime Allowance Minutes apply to the primary line first at the end of the billing cycle. If there are allowance minutes left over, they will be applied to the secondary line(s) based on the next highest user. In other markets, Monthly Home Airtime Allowance Minutes will be applied depending on first usage. Monthly Home Airtime Minutes may not be carried over to the next billing cycle.

Mobile to mobile not available with fixed wireless devices with usage substantially from a single cell site. Mobile to mobile calls must be made within the mobile to mobile rate area and between Verizon Wireless customers. The roaming indicator light will be flashing or solid outside the mobile to mobile rate area, and national mobile to mobile rates will not apply. Accuracy of roaming indicator cannot be guaranteed, although actual charges will be accurate based on billing system information.

Calls may be billed as mobile to mobile only when Caller ID is present. Equipment used by persons called and their location will affect the availability of mobile to mobile service. Digital service required. Does not work in analog markets. To begin using your tri-mode phone, please follow the direction included with your phone. Failure to program your tri-mode phone

properly may result in inaccurate roaming indicator display of your calling area and in additional charges. Where applicable, order in which monthly airtime allowance minutes, Night & Weekend minutes, Weekend minutes and mobile to mobile minutes are applied may vary by market.

Subject to the terms of the Service Agreement, which applies to all lines on an account. Please read and understand it before activating. Our liability is significantly limited. Billing, shipping, and end-user address must be within the Verizon Wireless licensed service area where the wireless phone number is issued. Toll, taxes and surcharges, including the Federal Universal Service and Regulatory Fee resulting from our costs of Federal Government assessments, apply and are in addition to airtime.

Airtime minutes are not transferable except for Family SharePlan[sm]. Verizon Wireless calling plans, rate areas, rates, agreement provisions, business practices, procedures and policies are subject to change as specified in the Service Agreement.

Attachment 4

Example of a monthly bill from Verizon Wireless for a 3-phone family package

verizonwireless

P.O. BOX 17120
TUCSON, AZ 85731-7120

Account Number .....
Invoice Number 3 0
Billing Date ..... October 25, 2003

SUSAN M.

MA

Account Summary

Previous Balance	245.51	
Payments - Thank you	245.51	Credit
Balance Forward	.00	
Current Charges	126.77	
**includes Late Fee 94		
Total Amount Due by 11/24/03	**$126.77**	

** Late Fee amount is included in total Current Charges amount.

Verizon Wireless News

Late fees begin to accrue on balances unpaid for 30 days at a rate of 1.5% per month (18% per annum).

Good news for Roadside Assistance customers.

See details inside this bill.

View and pay your bill online. Visit us on our web site at verizonwireless.com
Call Customer Service toll free at 1-800-922-0204 (or *611 from your wireless phone).
Please see reverse side for a description of our charges and the correspondence address.

Please detach here and return this portion with your payment

CUSTOMER ACCOUNT NO: IE
INVOICE NO: 3 0
BILLING DATE: October 25, 2003

SUSAN M.

MA

verizonwireless

BALANCE FORWARD .00
CURRENT CHARGES 126.77

AMOUNT DUE BY 11/24/03 $126.77
MAKE CHECK PAYABLE TO
VERIZON WIRELESS
AMOUNT
PAID $ ☐☐☐.☐☐

P.O. BOX 489
NEWARK, NJ 07101-0489

☐ *Account or user address change? If yes, please check box and see reverse side.*

3 0900 ,0000

Your Customer Agreement, any applicable tariff and your Calling Plan determine your and our rights. The items below are only for your information and convenience.

Monthly Access Charge - Paying this charge gives you access to the Verizon Wireless cellular network.

Prorate Charges (partial month)
Monthly Access/Allowance Minute - On your first bill or when you change your calling plan, we will bill a prorated (partial month) portion of the monthly access charge calculated from the date you began service to your first bill cycle date or effective date of the calling plan change, plus the next month's access charge if we bill you in advance. We calculate allowance minutes in the same manner.

Additional Services include Enhanced Services and other services such as Automatic Call Delivery, Voice Mail, Text Messaging and Web Access. Enhanced Services include but are not limited to Call Forwarding, Call Waiting, Three-Way Calling and Busy/No Answer Transfer.
Additional Services Prorate (partial month) - These services may be billed a month in advance and may be prorated based on the effective start and end dates of the enhanced service.

Adjustments include any credit and charge adjustments for the current and/or prior billing periods.

Home Usage and Charges - Home airtime allowance and other call charges are billed in full minute increments as dictated by your Calling Plan. Home airtime is billed for incoming calls received, as well as outgoing calls made, while in your home/extended home system. Charges for calls that connect begin when you first press "SEND" or, for incoming calls, when the call connects to the system which may be a few seconds before you press "SEND", and end when the call disconnects from the system. Answered calls to fax/data modems or other routing devices are billable calls. Calls to 911 and certain other emergency services are toll and airtime free. Home airtime charges reflect call activity during the current bill cycle and may include calls made during prior bill cycles.

Peak/Off Peak Hours vary by Calling Plan and are determined by the time you place the call. Please refer to Calling Plan brochure for the peak and off-peak hours in your area.

Other Call Charges:
Landline Charges are fees you incur when you place a cellular call that is processed through a local telephone company. This charge may apply to calls connected to a landline telephone number, a pager or cellular phone not on the Verizon Wireless network. These charges are in addition to your airtime charges and allowances, and vary according to Calling Plan. Landline charges vary when roaming based on charges established by the visited system and Verizon Wireless.

Regional Calling, Toll and Cellular Long Distance Charges are in addition to the home airtime charges for your calls. You will incur toll, regional calling or cellular long distance charges when you are in a cellular local calling area and place a call to a number outside that area. These charges may apply to calls completed through enhanced network services such as Call Forwarding, Call Waiting, Three-Way Calling, Busy/No Answer Transfer and Automatic Call Delivery. Your cellular local calling area may differ from your home airtime rate area. Regional calling, *toll and cellular long distance charges may vary while* roaming based on the rates of the visited system and Verizon Wireless. These charges appear in the Home Usage and Charges section.

Data Charges - Kilobyte usage rounded to next full Kilobyte at end of billing cycle. KB & Kilobyte = 1024 bytes/octets. 1024 KB = 1 Megabyte.

Automatic Call Delivery is a feature that allows you to automatically receive incoming calls while roaming. Airtime and toll charges apply to calls routed through Automatic Call Delivery.

Roam Usage and Charges represent charges for airtime used outside your home area. Airtime minutes used while roaming are not a part of your Calling Plan airtime allowance, unless your Calling Plan specifies otherwise. Billing for roaming minutes used on another carrier's network may be delayed depending on when that carrier bills Verizon Wireless. For incoming and outgoing calls while roaming, in addition to your airtime charges, you may incur landline, regional calling, toll and cellular long distance charges, and charges for incomplete calls, busy signals or unanswered calls. Charges may also include daily surcharges, taxes and automatic call delivery charges.

Verizon Wireless' Other Charges and Credits includes a Federal Universal Service Charge to recover costs imposed on Verizon Wireless by the government to support universal service, a Regulatory Charge to recover Verizon Wireless' costs of complying with government requirements and other charges and credits.

Late Fees result if any portion of a payment is outstanding at the time of the payment due dates shown on page one of your statement. Verizon Wireless may apply a late payment charge per month equal to the greater of five dollars ($5) or 1.5% of the unpaid balance, or the greatest amount permitted by law on balances outstanding on the due date. Late fee charges are liquidated damages and are not a penalty.

California - Questions About Your Bill? Call Customer Service at 1-800-922-0204. If you are unable to resolve any service problem or billing dispute with Verizon Wireless, you may file a claim with the California Public Utilities Commission (CPUC) by sending a full explanation with payment for the full amount in dispute by check or money order, along with a copy of your disputed bills, to CPUC, Consumer Affairs Branch, 505 Van Ness Avenue, Room 2003, San Francisco, CA 94102, or email consumeraffairs@cpuc.ca.gov, or call (800) 649-7570/TDD (800) 229-6846.

New Mexico - Questions About Your Bill? Call Customer Service at 800-922-0204 or by dialing *611 from your wireless phone. If you are unable to resolve any service problem or billing dispute with Verizon Wireless, you may contact the New Mexico Public Regulation Commission's Consumer Relations Division at 800-663-9782 for assistance. ¿Tiene preguntas sobre su factura? Llame a Servicio al Cliente al 1-800-922-0204 o marque *611 desde su *teléfono inalámbrico. Si no puede resolver su* problema de servicio o su disputa con Verizon Wireless, puede contactar a la División de Relaciones del Consumidor de la Comisión de Regulación Pública de Nuevo México, al 1-800-663-9782 para asistencia.

We reserve the right to make changes to your Customer Agreement as well as to our business practices and procedures.

HOW TO REACH CUSTOMER SERVICE: **Verizon Wireless appreciates your business. If you have any questions regarding billing or service, here's how to contact us:**

By using your wireless phone:	Via the Internet:	By phone:	Correspondence by mail:	Send payment to:
Dial *611 then SEND.	verizonwireless.com	1-800-922-0204	Verizon Wireless P.O. Box 5029 Wallingford, CT 06492-7529	Verizon Wireless P.O. Box 489 Newark, NJ 07101-0489

CHANGE OF MAILING ADDRESS SECTION ONLY

Please contact our Customer Service department to have the account name changed.

Account Number:

Address: _____

City: _____

State: _____ **ZIP code:** _____

Can be reached at the following telephone numbers:

Day: ( ) _____ - _____ **Evening:** ( ) _____ - _____

PLACE OF PRIMARY USE (PPU)-The home or business mailing address indicated above is for the person using the phone(s) and is the person's residential street address or primary business street address. ____YES ____NO. If "No" and for multi line accounts with more than one PPU address per mobile, please contact our Customer Service department or visit our website to change the user's PPU address.

Please allow two billing cycles before an address change will take effect.

verizonwireless

Account Summary

Account Number .....
Invoice Number ..... 3(....0
Billing Date ..... October 25, 2003

Previous Balance **$245.51**

Payments **Thank you**

Payment Received 10/09/2003 245.51 Credit

Total Payments **$245.51 Credit**

Total Balance Forward **$0.00**

Current Charges

Monthly Access	79.99
Additional Services	3.99
Home Usage and Charges	25.55
Data and Special Services Usage and Charges	4.77
Verizon Wireless' Other Charges and Credits	2.81
Taxes, Governmental Surcharges and Fees	9.66

Total Current Charges **$126.77**

Total Amount Due By 11/24/03 **$126.77**

Account Summary By Wireless Number

Primary User / Wireless Number	Monthly Access	Additional Services	Equipment Charges	Home Usage & Charges	Roam Usage & Charges	Data & Special Svc Usage & Charges	VZW's Other Charges & Credits	Taxes, Governmental Surcharges and Fees	Total Charges
Account	.00	.00	.00	.00	.00	.00	.94	.03	.97
Susan M 339-832-	39.99	.00	.00	.00	.00	.00	.65	3.55	44.19
Susan M. 339-832-	20.00	3.99	.00	.00	.00	4.77	.41	2.07	31.24
Susan M. 339-832	20.00	.00	.00	25.55	.00	.00	.81	4.01	50.37
Totals	**79.99**	**3.99**	**.00**	**25.55**	**.00**	**4.77**	**2.81**	**9.66**	**126.77**

Account Charges and Credits

	Amount
Late Fee	0.94
Federal Tax	0.03
Total Account Charges and Credits	**$0.97**

verizonwireless

Account Number.....
Invoice Number 3 0
Billing Date ..... October 25, 2003

Charges for Wireless Number (339) 832 Susan M

Your Wireless Plan Details

Current Plan - PAP4 AMERICA'S CHOICE FAMILY SHARE PRIMARY 400 ANYTIME 1102

Monthly Access	Monthly Allowance Minutes (defined by your Calling Plan)	Additional Per Minute Charge (defined by your Calling Plan)	
$39.99	400 general	$.45 peak	$.45 off-peak

Active Additional Services: Caller ID Service - 1000 Natl Mobile to Mobile Min - Unlimited Nite & Wknds - Voice Mail Access Charge

Your Promotional Details

	Start Date
Unlimited N&W MIN+1000 Mobile-Mobile Min for Life/Optional 1 MO Credit Txt Messaging OR Mobile Web/Optional 2 Mos Credit Voice Gear & Roadside Assist; Prevailing Rates Thereafter	12/28/02

Monthly Access Charges

		Amount
Monthly Access	from 10/26/03 to 11/25/03	39.99
Total Monthly Access Charges		**$39.99**

Home Usage and Charges

	Peak	Off-Peak	Amount
Current Month's Airtime Usage			
Airtime (Minutes)	39	55	
Monthly Allowance	19	0	Included
Weekend/Night Feature Minutes	0	55	Included
Mobile to Mobile Allowance Minutes	20	0	Included
Current Month's Billable Airtime	**0**	**0**	
Current Month's Airtime Charges	**0.00**	**0.00**	**$0.00**
Total Home Usage and Charges			**$0.00**

Verizon Wireless' Other Charges and Credits

	Amount
Fed Universal Service Charge	.60
Regulatory Charge	.05
Total Verizon Wireless' Other Charges and Credits	**$.65**

verizonwireless

Account Number.....
Invoice Number ..... 3 [illegible]0
Billing Date ..... October 25, 2003

Taxes, Governmental Surcharges and Fees	Amount
MA Wireless E911 Srvc Surchg	.30
Federal Tax	**1.22**
State Tax:	
MA State Sales Tax	2.03
Total State Tax	**2.03**
Total Taxes, Governmental Surcharges and Fees	**$3.55**

Total Current Charges for Wireless Number (339) 832- **$44.19**

Wireless Details for (339) 832- Susan M

Home Area

#	Date	Time	Rate Period	Call Origination+	Called Phone Number	Call Destination		Minutes	Usage Type	Home Airtime Charges	Other Call Type	Other Call Charges	Total Charges
1	09/26	04:50P	P	Home Area	(339) 832-	Incoming	CL	3	MN	Included		.00	.00
2	09/26	07:21P	P	Home Area	(339) 832-	Incoming	CL	1	MN	Included		.00	.00
3	09/26	09:01P	O	Home Area	(339) 832-	Incoming	CL	2	MW	Included		.00	.00
4	09/27	10:59A	O	Home Area	(339) 832-	Incoming	CL	2	MW	Included		.00	.00
5	09/29	09:02P	O	Home Area	(781) 293-	Bryantvl	MA	6	W	Included		.00	.00
6	10/04	11:24A	O	Home Area	(339) 832-	Incoming	CL	4	W	Included		.00	.00
7	10/04	03:37P	O	Home Area	(339) 832-	Incoming	CL	1	W	Included		.00	.00
8	10/04	07:28P	O	Home Area	(781) 829-	Hanover	MA	1	W	Included		.00	.00
9	10/04	09:21P	O	Home Area	(339) 832-	Incoming	CL	5	MW	Included		.00	.00
10	10/05	11:17A	O	Home Area	(339) 832-	Incoming	CL	3	MW	Included		.00	.00
11	10/05	11:59A	O	Home Area	(508) 583-	Brockton	MA	4	W	Included		.00	.00
12	10/05	12:50P	O	Home Area	(508) 583-	Brockton	MA	2	W	Included		.00	.00
13	10/05	12:59P	O	Home Area	(508) 583-	Brockton	MA	3	W	Included		.00	.00
14	10/05	04:23P	O	Home Area	(339) 832-	Incoming	CL	2	MW	Included		.00	.00
15	10/05	04:56P	O	Home Area	(339) 832-	Incoming	CL	1	W	Included		.00	.00
16	10/08	09:51A	P	Home Area	(339) 832-	Incoming	CL	4	A	Included		.00	.00
17	10/09	04:01P	P	Home Area	(339) 832-	Incoming	CL	2	A	Included		.00	.00
18	10/09	04:05P	P	Home Area	(339) 832-	Incoming	CL	1	A	Included		.00	.00
19	10/09	06:22P	P	Home Area	(339) 832-	Incoming	CL	1	MN	Included		.00	.00
20	10/09	06:43P	P	Home Area	(339) 832-	Mobile		2	MN	Included		.00	.00
21	10/09	06:56P	P	Home Area	(339) 832-	Incoming	CL	2	MN	Included		.00	.00
22	10/10	05:07P	P	Home Area	(781) 826-	Hanover	MA	1	A	Included		.00	.00
23	10/11	08:18P	O	Home Area	(339) 832-	Incoming	CL	2	W	Included		.00	.00
24	10/11	08:30P	O	Home Area	(781) 294-	Bryantvl	MA	6	W	Included		.00	.00
25	10/12	12:12P	O	Home Area	(508) 583-	Brockton	MA	2	W	Included		.00	.00
26	10/12	01:17P	O	Home Area	(339) 832-	Incoming	CL	1	W	Included		.00	.00
27	10/13	02:00P	P	Home Area	(339) 832-	Incoming	CL	1	MN	Included		.00	.00
28	10/15	01:10P	P	Home Area	(339) 832-	Incoming	CL	2	A	Included		.00	.00
29	10/15	01:48P	P	Home Area	(617) 598-	Boston	MA	2	A	Included		.00	.00
30	10/15	03:50P	P	Home Area	(781) 294-	Bryantvl	MA	1	A	Included		.00	.00
31	10/15	03:50P	P	Home Area	(339) 832-	Mobile		2	MN	Included		.00	.00
32	10/17	07:38A	P	Home Area	(339) 832-	Incoming	CL	2	MN	Included		.00	.00
33	10/17	12:51P	P	Home Area	(000) 000-	Voice Mail		2	RA	Included		.00	.00

verizonwireless

Account Number.....
Invoice Number..... 3[illegible] 0
Billing Date ..... October 25, 2003

Continued from previous page . . .

Home Area

#	Date	Time	Rate Period	Call Origination+	Called Phone Number	Call Destination		Minutes	Usage Type	Home Airtime Charges	Other Call Type	Other Call Charges	Total Charges
34	10/17	12:52P	P	Home Area	(000) 000-	Voice Mail		1	RA	Included		.00	.00
35	10/17	12:59P	P	Home Area	(339) 832-[illegible]	Mobile		3	MN	Included		.00	.00
36	10/19	12:01P	O	Home Area	(508) 583-	Brockton	MA	8	W	Included		.00	.00
37	10/21	04:02P	P	Home Area	(339) 832-	Incoming	CL	2	MN	Included		.00	.00
38	10/23	12:14P	P	Home Area	(339) 832-	Incoming	CL	1	A	Included		.00	.00
39	10/23	02:25P	P	Home Area	(339) 832-	Incoming	CL	1	MN	Included		.00	.00
40	10/24	05:03P	P	Home Area	(781) 829-	Hanover	MA	1	A	Included		.00	.00
41	10/24	06:13P	P	Home Area	(339) 832-	Incoming	CL	1	A	Included		.00	.00

+Designates the location, city and state, of the cell tower or switching center which processed the call.

Legends:			
Rate Period	**O** = Off-Peak	**P** = Peak	
Usage Type	**A** = Price Plan Allowance **M** = Mobile to Mobile	**N** = Mob to Mob Allow Mins **R** = Voice Mail Retrieval	**W** = Wknd/Nght Feature Mins

verizonwireless

Account Number .....
Invoice Number ..... 3 . . 0
Billing Date ..... October 25, 2003

Charges for Wireless Number (339) 832- Susan M.

Your Wireless Plan Details

Current Plan - ACFSC AMERICA'S CHOICE FAMILY SHARE SECOND 1002

Monthly Access	Monthly Allowance Minutes (defined by your Calling Plan)			Additional Per Minute Charge (defined by your Calling Plan)	
$20.00	0 peak	0 off-peak	0 weekend	$.45 peak	$.45 off-peak

Active Additional Services: Caller ID Service - Voice Mail Access Charge

Monthly Access Charges

		Amount
Monthly Access	from 10/26/03 to 11/25/03	20.00
Total Monthly Access Charges		**$20.00**

Additional Service Charges

		Amount
Phone Insurance - Asurion	from 10/26/03 to 11/25/03	3.99
Total Additional Service Charges		**$3.99**

Home Usage and Charges

	Peak	Off-Peak	Amount
Current Month's Airtime Usage			
Airtime (Minutes)	333	465	
Weekend/Night Feature Minutes	0	406	Included
Mobile to Mobile Allowance Minutes	41	59	Included
Shared Allowance Minutes	292	0	Included
Current Month's Billable Airtime	**0**	**0**	
Current Month's Airtime Charges	**0.00**	**0.00**	**$0.00**
Total Home Usage and Charges			**$0.00**

Data and Special Services Usage and Charges

	Messages	Downloads	Amount
Current Month's Home Usage			
Application Downloads	0	1	1.99
Txt Messaging - Received	19	0	0.38
Txt Messaging - Sent	24	0	2.40
Total Number of Units	**43**	**0**	
Total Application Downloads	**0**	**1**	
Total Data and Special Services Usage and Charges			**$4.77**

verizonwireless

Account Number.....
Invoice Number ..... 3('0
Billing Date ..... October 25, 2003

Verizon Wireless' Other Charges and Credits

	Amount
Fed Universal Service Charge	.36
Regulatory Charge	.05
Total Verizon Wireless' Other Charges and Credits	**$.41**

Taxes, Governmental Surcharges and Fees

	Amount
MA Wireless E911 Srvc Surchg	.30
Federal Tax	**.61**
State Tax:	
MA State Sales Tax	1.16
Total State Tax	**1.16**
Total Taxes, Governmental Surcharges and Fees	**$2.07**

Total Current Charges for Wireless Number (339) 832- $31.24

Wireless Details for (339) 832- Susan M

Home Area

#	Date	Time	Rate Period	Call Origination+		Called Phone Number	Call Destination		Minutes	Usage Type	Home Airtime Charges	Other Call Type	Other Call Charges	Total Charges
1	09/26	07:26A	P	Home Area		(781) 294-	Bryantvl	MA	1	A	Included		.00	.00
2	09/26	01:31P	P	Springfl/A	MA	(000) 000-	Voice Mail	CL	1	RA	Included		.00	.00
3	09/26	01:32P	P	Springfl/A	MA	(617) 755-	Boston	MA	4	A	Included		.00	.00
4	09/26	04:47P	P	Springfl/A	MA	(339) 832-	Kingston	MA	4	MN	Included		.00	.00
5	09/26	05:05P	P	Springfl/A	MA	(339) 832-	Incoming	CL	7	A	Included		.00	.00
6	09/26	08:16P	P	Springfl/A	MA	(339) 832-	Kingston	MA	1	RMN	Included		.00	.00
7	09/26	08:18P	P	Springfl/A	MA	(339) 832-	Kingston	MA	2	MN	Included		.00	.00
8	09/26	09:21P	O	Springfl/A	MA	(339) 832-	Incoming	CL	1	MN	Included		.00	.00
9	09/26	09:30P	O	Springfl/A	MA	(339) 832-	Kingston	MA	2	MN	Included		.00	.00
10	09/26	09:32P	O	Springfl/A	MA	(339) 832-	Incoming	CL	2	MN	Included		.00	.00
11	09/26	09:33P	O	Springfl/A	MA	(781) 294-	Bryantvl	MA	7	W	Included		.00	.00
12	09/26	09:40P	O	Springfl/A	MA	(617) 755-	Boston	MA	10	W	Included		.00	.00
13	09/27	09:27A	O	Springfl/A	MA	(000) 000-	Voice Mail	CL	1	RW	Included		.00	.00
14	09/27	09:29A	O	Springfl/A	MA	(339) 832-	Kingston	MA	1	MN	Included		.00	.00
15	09/27	09:30A	O	Springfl/A	MA	(339) 832-	Kingston	MA	1	MN	Included		.00	.00
16	09/27	09:36A	O	Springfl/A	MA	(339) 832-	Kingston	MA	1	MN	Included		.00	.00
17	09/27	10:16A	O	Springfl/A	MA	(339) 832-	Kingston	MA	1	MN	Included		.00	.00
18	09/27	10:35A	O	Springfl/A	MA	(339) 832-	Kingston	MA	1	MN	Included		.00	.00
19	09/27	10:35A	O	Springfl/A	MA	(781) 294-	Bryantvl	MA	1	W	Included		.00	.00
20	09/27	10:55A	O	Springfl/A	MA	(339) 832-	Kingston	MA	1	MN	Included		.00	.00
21	09/27	10:55A	O	Springfl/A	MA	(339) 832-	Kingston	MA	2	MN	Included		.00	.00
22	09/27	01:58P	O	Springfl/A	MA	(617) 755-	Boston	MA	6	W	Included		.00	.00
23	09/27	04:25P	O	Springfl/A	MA	(339) 832-	Incoming	CL	3	W	Included		.00	.00
24	09/27	04:33P	O	Springfl/A	MA	(339) 832-	Kingston	MA	1	MN	Included		.00	.00
25	09/27	04:33P	O	Springfl/A	MA	(781) 294-	Bryantvl	MA	2	W	Included		.00	.00
26	09/27	04:37P	O	Springfl/A	MA	(781) 775	Waltham	MA	2	W	Included		.00	.00

Control #

verizonwireless

Account Number .....
Invoice Number 3 0
Billing Date ..... October 25, 2003

Continued from previous page . . .

Home Area

#	Date	Time	Rate Period	Call Origination+	Called Phone Number	Call Destination		Minutes	Usage Type	Home Airtime Charges	Other Call Type	Other Call Charges	Total Charges
27	09/27	04:42P	O	Springfl/A MA	(339) 832-	Incoming	CL	2	W	Included		.00	.00
28	09/27	07:08P	O	Home Area	(339) 832-	Incoming	CL	2	W	Included		.00	.00
29	09/27	07:21P	O	Home Area	(617) 755-	Boston	MA	1	W	Included		.00	.00
30	09/27	07:21P	O	Home Area	(617) 755-	Boston	MA	1	W	Included		.00	.00
31	09/27	07:22P	O	Home Area	(781) 775-	Waltham	MA	1	W	Included		.00	.00
32	09/27	07:23P	O	Home Area	(617) 755-	Boston	MA	1	W	Included		.00	.00
33	09/27	07:24P	O	Home Area	(617) 755-	Boston	MA	1	W	Included		.00	.00
34	09/27	07:26P	O	Home Area	(339) 832	Incoming	CL	4	W	Included		.00	.00
35	09/27	07:58P	O	Home Area	(617) 755-	Boston	MA	1	W	Included		.00	.00
36	09/28	11:03A	O	Home Area	(781) 294-	Bryantvl	MA	2	W	Included		.00	.00
37	09/28	12:59P	O	Home Area	(339) 832	Incoming	CL	8	MN	Included		.00	.00
38	09/28	01:09P	O	Home Area	(339) 832-	Incoming	CL	2	MN	Included		.00	.00
39	09/28	01:52P	O	Home Area	(339) 832-	Incoming	CL	1	W	Included		.00	.00
40	09/28	01:55P	O	Home Area	(339) 832-	Incoming	CL	1	W	Included		.00	.00
41	09/28	01:57P	O	Home Area	(781) 775-	Waltham	MA	23	W	Included		.00	.00
42	09/28	04:29P	O	Home Area	(339) 832-	Incoming	CL	4	W	Included		.00	.00
43	09/28	04:53P	O	Home Area	(617) 755-	Boston	MA	1	W	Included		.00	.00
44	09/28	04:54P	O	Home Area	(781) 775-	Waltham	MA	1	W	Included		.00	.00
45	09/28	04:56P	O	Home Area	(781) 956-	Norwood	MA	2	W	Included		.00	.00
46	09/29	04:06P	P	Home Area	(339) 832-	Incoming	CL	11	A	Included		.00	.00
47	09/29	10:06P	O	Home Area	(339) 832-	Incoming	CL	17	W	Included		.00	.00
48	09/30	05:38P	P	Home Area	(339) 832-	Incoming	CL	1	A	Included		.00	.00
49	09/30	05:39P	P	Home Area	(781) 294-	Bryantvl	MA	2	A	Included		.00	.00
50	09/30	06:15P	P	Home Area	(617) 755-	Boston	MA	1	A	Included		.00	.00
51	09/30	09:10P	O	Home Area	(339) 832-	Mobile		1	RMN	Included		.00	.00
52	09/30	09:11P	O	Home Area	(781) 826-	Hanover	MA	4	W	Included		.00	.00
53	09/30	09:14P	O	Home Area	(339) 832-	Incoming	CL	2	W	Included		.00	.00
54	09/30	09:16P	O	Home Area	(339) 832-	Incoming	CL	2	W	Included		.00	.00
55	09/30	09:19P	O	Home Area	(781) 293-	Bryantvl	MA	1	W	Included		.00	.00
56	09/30	09:49P	O	Home Area	(339) 832-	Incoming	CL	1	W	Included		.00	.00
57	09/30	10:12P	O	Home Area	(617) 448-	Mobile		2	MN	Included		.00	.00
58	10/01	06:40A	P	Home Area	(339) 832-	Incoming	CL	1	A	Included		.00	.00
59	10/01	09:22P	O	Home Area	(339) 832-	Mobile		1	RMN	Included		.00	.00
60	10/01	09:24P	O	Home Area	(617) 755-	Boston	MA	2	W	Included		.00	.00
61	10/01	09:27P	O	Home Area	(781) 956-	Norwood	MA	1	W	Included		.00	.00
62	10/01	09:27P	O	Home Area	(781) 826-	Hanover	MA	1	W	Included		.00	.00
63	10/01	09:31P	O	Home Area	(339) 832-	Incoming	CL	8	W	Included		.00	.00
64	10/01	10:56P	O	Home Area	(339) 832-	Incoming	CL	2	W	Included		.00	.00
65	10/02	07:02A	P	Home Area	(781) 956-	Norwood	MA	1	A	Included		.00	.00
66	10/02	03:46P	P	Home Area	(339) 832-	Incoming	CL	14	A	Included		.00	.00
67	10/02	07:28P	P	Home Area	(781) 724	Weymouth	MA	1	A	Included		.00	.00
68	10/02	07:29P	P	Home Area	(339) 832-	Incoming	CL	1	A	Included		.00	.00
69	10/02	10:10P	O	Home Area	(617) 755-	Boston	MA	8	W	Included		.00	.00
70	10/02	10:18P	O	Home Area	(781) 724-	Weymouth	MA	2	W	Included		.00	.00
71	10/02	11:02P	O	Home Area	(339) 832-	Incoming	CL	7	W	Included		.00	.00
72	10/03	06:53A	P	Home Area	(339) 832-	Incoming	CL	1	A	Included		.00	.00
73	10/03	05:43P	P	Home Area	(339) 832-	Mobile		1	RMN	Included		.00	.00
74	10/03	08:06P	P	Home Area	(617) 755-	Boston	MA	7	A	Included		.00	.00
75	10/03	08:13P	P	Home Area	(617) 448-	Mobile		3	MN	Included		.00	.00
76	10/03	08:21P	P	Home Area	(617) 640-	Dedham	MA	1	A	Included		.00	.00
77	10/03	08:22P	P	Home Area	(617) 460-	Cambridge	MA	6	A	Included		.00	.00

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Home Area

#	Date	Time	Rate Period	Call Origination+	Called Phone Number	Call Destination		Minutes	Usage Type	Home Airtime Charges	Other Call Type	Other Call Charges	Total Charges
78	10/03	08:27P	P	Home Area	(781) 956-	Norwood	MA	1	A	Included		.00	.00
79	10/04	08:33A	O	Home Area	(339) 832-	Incoming	CL	1	W	Included		.00	.00
80	10/04	01:32P	O	Home Area	(339) 832-	Incoming	CL	4	MN	Included		.00	.00
81	10/04	01:56P	O	Home Area	(781) 775-	Waltham	MA	10	W	Included		.00	.00
82	10/04	03:30P	O	Home Area	(339) 832-	Incoming	CL	1	W	Included		.00	.00
83	10/04	03:43P	O	Home Area	(339) 832-	Incoming	CL	4	W	Included		.00	.00
84	10/04	03:51P	O	Home Area	(339) 832-	Incoming	CL	4	W	Included		.00	.00
85	10/04	06:14P	O	Home Area	(617) 755-	Boston	MA	2	W	Included		.00	.00
86	10/04	06:16P	O	Home Area	(781) 775-	Waltham	MA	1	W	Included		.00	.00
87	10/04	08:13P	O	Home Area	(781) 749-	Hingham	MA	2	W	Included		.00	.00
88	10/04	08:16P	O	Home Area	(781) 294-	Bryantvl	MA	2	W	Included		.00	.00
89	10/04	08:18P	O	Home Area	(781) 294-	Bryantvl	MA	2	W	Included		.00	.00
90	10/05	01:22A	O	Home Area	(781) 775-	Waltham	MA	2	W	Included		.00	.00
91	10/05	11:48A	O	Home Area	(781) 294-	Bryantvl	MA	3	W	Included		.00	.00
92	10/05	01:28P	O	Home Area	(339) 832-	Incoming	CL	4	W	Included		.00	.00
93	10/05	01:33P	O	Home Area	(617) 448-	Mobile		2	MN	Included		.00	.00
94	10/05	02:04P	O	Home Area	(339) 832-	Incoming	CL	2	W	Included		.00	.00
95	10/05	02:44P	O	Home Area	(781) 294-	Bryantvl	MA	2	W	Included		.00	.00
96	10/05	04:18P	O	Home Area	(339) 832-	Incoming	CL	2	W	Included		.00	.00
97	10/05	06:43P	O	Home Area	(617) 755-	Boston	MA	4	W	Included		.00	.00
98	10/05	06:49P	O	Home Area	(339) 832-	Incoming	CL	2	W	Included		.00	.00
99	10/05	06:52P	O	Home Area	(781) 775-	Waltham	MA	2	W	Included		.00	.00
100	10/06	04:37P	P	Home Area	(339) 832-	Incoming	CL	17	A	Included		.00	.00
101	10/06	11:28P	O	Home Area	(339) 832-	Incoming	CL	3	W	Included		.00	.00
102	10/06	11:36P	O	Home Area	(339) 832-	Incoming	CL	1	W	Included		.00	.00
103	10/07	06:35A	P	Home Area	(339) 832-	Mobile		2	RMN	Included		.00	.00
104	10/07	12:30P	P	Home Area	(617) 755-	Boston	MA	10	A	Included		.00	.00
105	10/07	03:01P	P	Home Area	(617) 448-	Mobile		1	MN	Included		.00	.00
106	10/07	06:08P	P	Home Area	(339) 832-	Incoming	CL	8	A	Included		.00	.00
107	10/08	06:04P	P	Home Area	(617) 755-	Boston	MA	1	A	Included		.00	.00
108	10/08	06:05P	P	Home Area	(781) 775-	Waltham	MA	6	A	Included		.00	.00
109	10/08	06:13P	P	Home Area	(617) 598-	Boston	MA	1	A	Included		.00	.00
110	10/08	06:14P	P	Home Area	(339) 832-	Mobile		3	MN	Included		.00	.00
111	10/08	07:10P	P	Home Area	(617) 755-	Boston	MA	7	A	Included		.00	.00
112	10/08	07:59P	P	Home Area	(781) 775-	Waltham	MA	2	A	Included		.00	.00
113	10/09	12:04A	O	Home Area	(339) 832-	Incoming	CL	4	W	Included		.00	.00
114	10/09	02:41P	P	Home Area	(617) 755-	Boston	MA	4	A	Included		.00	.00
115	10/09	05:55P	P	Home Area	(617) 755-	Boston	MA	1	A	Included		.00	.00
116	10/09	07:57P	P	Home Area	(000) 000-	Voice Mail		2	RA	Included		.00	.00
117	10/09	07:59P	P	Home Area	(781) 956-	Norwood	MA	1	A	Included		.00	.00
118	10/09	08:03P	P	Home Area	(339) 832-	Incoming	CL	2	MN	Included		.00	.00
119	10/09	08:06P	P	Home Area	(617) 448-	Mobile		1	MN	Included		.00	.00
120	10/10	02:08P	P	Home Area	(617) 755-	Boston	MA	5	A	Included		.00	.00
121	10/10	04:02P	P	Home Area	(617) 460-	Cambridge	MA	2	A	Included		.00	.00
122	10/10	04:04P	P	Home Area	(617) 448-	Mobile		1	MN	Included		.00	.00
123	10/10	04:24P	P	Home Area	(339) 832-	Incoming	CL	3	A	Included		.00	.00
124	10/10	05:07P	P	Home Area	(339) 832-	Incoming	CL	6	A	Included		.00	.00
125	10/10	06:19P	P	Home Area	(339) 832-	Incoming	CL	2	A	Included		.00	.00
126	10/11	12:11P	O	Home Area	(781) 956-	Norwood	MA	5	W	Included		.00	.00
127	10/11	12:44P	O	Home Area	(617) 755-	Boston	MA	4	W	Included		.00	.00
128	10/12	11:17A	O	Home Area	(000) 000-	Voice Mail		1	RW	Included		.00	.00

Control #:

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Home Area

#	Date	Time	Rate Period	Call Origination+	Called Phone Number	Call Destination		Minutes	Usage Type	Home Airtime Charges	Other Call Type	Other Call Charges	Total Charges
129	10/12	11:28A	O	Home Area	(781) 878	Rockland	MA	1	W	Included		.00	.00
130	10/12	05:23P	O	Home Area	(617) 755-	Boston	MA	3	W	Included		.00	.00
131	10/12	08:09P	O	Home Area	(617) 448-	Mobile		4	MN	Included		.00	.00
132	10/12	08:48P	O	Home Area	(339) 832-	Incoming	CL	2	W	Included		.00	.00
133	10/12	09:21P	O	Home Area	(781) 775-	Waltham	MA	2	W	Included		.00	.00
134	10/12	09:26P	O	Home Area	(617) 755-	Boston	MA	16	W	Included		.00	.00
135	10/13	01:59P	P	Home Area	(339) 832-	Mobile		1	MN	Included		.00	.00
136	10/13	01:59P	P	Home Area	(339) 832-	Mobile		1	MN	Included		.00	.00
137	10/13	02:53P	P	Home Area	(617) 755-	Boston	MA	1	A	Included		.00	.00
138	10/13	06:09P	P	Home Area	(617) 598-	Boston	MA	1	A	Included		.00	.00
139	10/13	06:09P	P	Home Area	(617) 598-	Boston	MA	1	A	Included		.00	.00
140	10/13	08:22P	P	Home Area	(339) 832-	Incoming	CL	3	A	Included		00	.00
141	10/13	11:36P	O	Home Area	(339) 832-	Incoming	CL	2	W	Included		.00	.00
142	10/14	04:47P	P	Home Area	(339) 832-	Mobile		1	RMN	Included		.00	.00
143	10/14	06:14P	P	Home Area	(617) 755-	Boston	MA	4	A	Included		.00	.00
144	10/14	07:21P	P	Home Area	(339) 832-	Incoming	CL	3	A	Included		00	.00
145	10/14	07:32P	P	Home Area	(339) 832-	Incoming	CL	6	A	Included		.00	.00
146	10/14	08:11P	P	Home Area	(339) 832-	Incoming	CL	11	A	Included		.00	00
147	10/15	02:34P	P	Home Area	(617) 755-	Boston	MA	1	A	Included		.00	.00
148	10/15	03:50P	P	Home Area	(339) 832-	Incoming	CL	2	MN	Included		.00	.00
149	10/15	05:45P	P	Home Area	(339) 832-	Incoming	CL	3	A	Included		.00	.00
150	10/15	07:50P	P	Home Area	(339) 832-	Incoming	CL	1	A	Included		.00	.00
151	10/15	10:22P	O	Home Area	(339) 832-	Incoming	CL	12	W	Included		.00	.00
152	10/16	02:48P	P	Home Area	(781) 956	Norwood	MA	2	A	Included		.00	.00
153	10/16	04:24P	P	Home Area	(000) 000-	Voice Mail		1	RA	Included		.00	.00
154	10/16	04:25P	P	Home Area	(617) 755-	Boston	MA	1	A	Included		.00	.00
155	10/16	05:03P	P	Home Area	(339) 832-	Incoming	CL	1	A	Included		.00	.00
156	10/16	05:04P	P	Home Area	(781) 956-	Norwood	MA	6	A	Included		.00	.00
157	10/16	06:35P	P	Home Area	(781) 775-	Waltham	MA	2	A	Included		.00	.00
158	10/16	08:07P	P	Home Area	(339) 832-	Incoming	CL	1	A	Included		.00	00
159	10/16	08:20P	P	Home Area	(617) 755-	Boston	MA	2	A	Included		.00	.00
160	10/16	08:56P	P	Home Area	(339) 832-	Incoming	CL	3	A	Included		.00	.00
161	10/16	09:15P	O	Home Area	(781) 294-	Bryantvl	MA	2	W	Included		.00	.00
162	10/17	12:32A	O	Home Area	(617) 755-	Boston	MA	2	W	Included		.00	.00
163	10/17	01:00A	O	Home Area	(339) 832-	Incoming	CL	17	W	Included		.00	.00
164	10/17	07:01A	P	Home Area	(339) 832-	Incoming	CL	1	A	Included		.00	.00
165	10/17	01:12P	P	Home Area	(617) 605-	Malden	MA	1	A	Included		.00	.00
166	10/17	01:16P	P	Home Area	(339) 83(	Incoming	CL	3	A	Included		.00	.00
167	10/17	01:43P	P	Home Area	(617) 755	Boston	MA	2	A	Included		.00	.00
168	10/17	02:05P	P	Home Area	(339) 832-	Incoming	CL	5	A	Included		.00	.00
169	10/17	02:27P	P	Home Area	(617) 448-	Mobile		1	MN	Included		.00	.00
170	10/17	02:29P	P	Home Area	(617) 460-	Cambridge	MA	2	A	Included		.00	.00
171	10/17	02:50P	P	Home Area	(000) 000	Voice Mail		1	RA	Included		.00	.00
172	10/17	02:51P	P	Home Area	(339) 832	Mobile		4	MN	Included		.00	.00
173	10/17	04:56P	P	Home Area	(339) 832-	Incoming	CL	2	A	Included		.00	.00
174	10/17	06:54P	P	Home Area	(781) 775-	Waltham	MA	1	A	Included		.00	.00
175	10/17	09:03P	O	Home Area	(781) 775-	Waltham	MA	2	W	Included		.00	.00
176	10/17	09:50P	O	Home Area	(339) 832-	Incoming	CL	11	W	Included		.00	.00
177	10/18	11:31A	O	Home Area	(339) 832-	Incoming	CL	9	W	Included		.00	.00
178	10/18	12:08P	O	Home Area	(339) 832-	Incoming	CL	4	W	Included		.00	.00
179	10/18	12:16P	O	Home Area	(339) 832-	Incoming	CL	9	MN	Included		.00	.00

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Home Area

#	Date	Time	Rate Period	Call Origination+	Called Phone Number	Call Destination		Minutes	Usage Type	Home Airtime Charges	Other Call Type	Other Call Charges	Total Charges
180	10/18	02:01P	O	Home Area	(339) 832-	Incoming	CL	3	W	Included		.00	.00
181	10/18	03:05P	O	Home Area	(339) 832-	Incoming	CL	1	W	Included		.00	.00
182	10/18	03:48P	O	Home Area	(781) 775-	Waltham	MA	1	W	Included		.00	.00
183	10/18	03:50P	O	Home Area	(617) 755-	Boston	MA	2	W	Included		.00	.00
184	10/18	10:03P	O	Home Area	(339) 832-	Mobile		2	RMN	Included		.00	.00
185	10/18	10:56P	O	Home Area	(781) 294-	Bryantvl	MA	1	W	Included		.00	.00
186	10/18	11:29P	O	Home Area	(781) 956-	Norwood	MA	1	W	Included		.00	.00
187	10/19	12:50P	O	Home Area	(339) 832-	Incoming	CL	1	W	Included		.00	.00
188	10/19	12:51P	O	Home Area	(617) 460-	Cambridge	MA	1	W	Included		.00	.00
189	10/19	12:52P	O	Home Area	(617) 448-	Mobile		1	MN	Included		.00	.00
190	10/19	12:53P	O	Home Area	(781) 956-	Norwood	MA	1	W	Included		.00	.00
191	10/19	12:58P	O	Home Area	(339) 832-	Incoming	CL	12	W	Included		.00	.00
192	10/19	01:19P	O	Home Area	(781) 267-	Braintree	MA	2	W	Included		.00	.00
193	10/19	01:21P	O	Home Area	(339) 832-	Incoming	CL	18	CW	Included		.00	.00
194	10/19	01:41P	O	Home Area	(339) 832-	Incoming	CL	19	W	Included		.00	.00
195	10/19	05:27P	O	Home Area	(781) 293-	Bryantvl	MA	1	W	Included		.00	.00
196	10/19	06:11P	O	Home Area	(339) 832-	Incoming	CL	10	W	Included		.00	.00
197	10/19	09:16P	O	Home Area	(339) 832-	Incoming	CL	9	W	Included		.00	.00
198	10/20	07:37A	P	Home Area	(781) 956-	Norwood	MA	3	A	Included		.00	.00
199	10/20	12:29P	P	Home Area	(781) 848-	Braintree	MA	1	A	Included		.00	.00
200	10/20	12:30P	P	Home Area	(617) 471-	Quincy	MA	1	A	Included		.00	.00
201	10/20	02:31P	P	Home Area	(000) 000-	Voice Mail		1	RA	Included		.00	.00
202	10/20	04:07P	P	Home Area	(339) 832-	Incoming	CL	6	A	Included		.00	.00
203	10/20	04:24P	P	Home Area	(781) 956-	Norwood	MA	4	A	Included		.00	.00
204	10/20	07:15P	P	Home Area	(339) 832-	Incoming	CL	1	MN	Included		.00	.00
205	10/20	07:28P	P	Home Area	(781) 337-	Weymouth	MA	2	A	Included		.00	.00
206	10/20	10:46P	O	Home Area	(339) 832-	Incoming	CL	1	W	Included		.00	.00
207	10/21	03:54P	P	Dover /B NH	(617) 755-	Boston	MA	6	A	Included		.00	.00
208	10/21	04:00P	P	Dover /B NH	(781) 294-	Bryantvl	MA	1	A	Included		.00	.00
209	10/21	04:01P	P	Dover /B NH	(339) 832-	Kingston	MA	2	MN	Included		.00	.00
210	10/21	05:24P	P	Home Area	(339) 832-	Incoming	CL	1	MN	Included		.00	.00
211	10/21	09:19P	O	Home Area	(339) 832-	Incoming	CL	8	W	Included		.00	.00
212	10/22	07:34A	P	Home Area	(781) 775-	Waltham	MA	3	A	Included		.00	.00
213	10/22	05:13P	P	Home Area	(781) 775-	Waltham	MA	2	A	Included		.00	.00
214	10/22	07:04P	P	Home Area	(781) 775-	Waltham	MA	2	A	Included		.00	.00
215	10/22	07:12P	P	Home Area	(339) 832-	Mobile		1	RMN	Included		.00	.00
216	10/22	07:15P	P	Home Area	(339) 832-	Incoming	CL	10	A	Included		.00	.00
217	10/22	08:23P	P	Home Area	(339) 832-	Incoming	CL	8	A	Included		.00	.00
218	10/23	04:26P	P	Home Area	(339) 832-	Incoming	CL	1	A	Included		.00	.00
219	10/23	05:33P	P	Home Area	(617) 755-	Boston	MA	1	A	Included		.00	.00
220	10/23	10:24P	O	Home Area	(617) 755-	Boston	MA	2	W	Included		.00	.00
221	10/23	10:44P	O	Home Area	(339) 832-	Incoming	CL	1	W	Included		.00	.00
222	10/24	07:08A	P	Home Area	(781) 826-	Hanover	MA	1	A	Included		.00	.00
223	10/24	07:09A	P	Home Area	(339) 832-	Mobile		1	RMN	Included		.00	.00
224	10/24	02:45P	P	Home Area	(339) 832-	Mobile		1	MN	Included		.00	.00
225	10/24	02:45P	P	Home Area	(617) 598-	Boston	MA	6	A	Included		.00	.00
226	10/24	02:51P	P	Home Area	(617) 755-	Boston	MA	1	A	Included		.00	.00
227	10/24	02:52P	P	Home Area	(339) 832-	Incoming	CL	6	CA	Included		.00	.00
228	10/24	02:58P	P	Home Area	(339) 832-	Mobile		1	RMN	Included		.00	.00
229	10/24	04:44P	P	Home Area	(781) 775-	Waltham	MA	7	A	Included		.00	.00

verizonwireless

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Home Area

#	Date	Time	Rate Period	Call Origination+	Called Phone Number	Call Destination		Minutes	Usage Type	Home Airtime Charges	Other Call Type	Other Call Charges	Total Charges
230	10/24	04:51P	P	Home Area	(617) 448-	Mobile		1	MN	Included		.00	.00
231	10/24	07:27P	P	Home Area	(339) 832-	Incoming	CL	7	A	Included		.00	.00
232	10/24	09:00P	P	Home Area	(339) 832-	Mobile		1	RMN	Included		.00	.00
233	10/24	09:26P	O	Home Area	(617) 448-	Mobile		1	MN	Included		.00	.00
234	10/24	10:10P	O	Home Area	(339) 832-	Incoming	CL	5	MN	Included		.00	.00
235	10/25	12:54P	O	Home Area	(617) 755-	Boston	MA	5	W	Included		.00	.00
236	10/25	02:08P	O	Home Area	(617) 755-	Boston	MA	1	W	Included		.00	.00
237	10/25	02:10P	O	Home Area	(617) 448-	Mobile		2	MN	Included		.00	.00
238	10/25	02:36P	O	Home Area	(781) 294-	Bryantvl	MA	1	W	Included		.00	.00
239	10/25	02:37P	O	Home Area	(339) 832-	Mobile		1	MN	Included		.00	.00
240	10/25	02:38P	O	Home Area	(781) 294	Bryantvl	MA	6	W	Included		.00	.00
241	10/25	02:44P	O	Home Area	(781) 294-	Bryantvl	MA	1	W	Included		.00	.00
242	10/25	03:01P	O	Home Area	(617) 755-	Boston	MA	1	W	Included		.00	.00
243	10/25	07:28P	O	Home Area	(339) 832-	Incoming	CL	2	W	Included		.00	.00

+Designates the location, city and state, of the cell tower or switching center which processed the call.

Data

#	Date	Time	Service Description	Minutes	Usage Type	Charges	Other Charges	Quality of Svc	Total Charges
1	10/25	08:40P	Bejeweled		Q1	1.99			1.99

Legends:			
Rate Period	**O** = Off-Peak	**P** = Peak	
Usage Type	**A** = Price Plan Allowance **C** = Call Waiting **M** = Mobile to Mobile	**N** = Mob to Mob Allow Mins **Q1** = Get It Now Download **R** = Voice Mail Retrieval	**W** = Wknd/Nght Feature Mins

verizonwireless

Account Number .....
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Charges for Wireless Number (339) 832- Susan M

Your Wireless Plan Details

Current Plan - ACFSC AMERICA'S CHOICE FAMILY SHARE SECOND 1002

Monthly Access	Monthly Allowance Minutes (defined by your Calling Plan)			Additional Per Minute Charge (defined by your Calling Plan)	
$20.00	0 peak	0 off-peak	0 weekend	$.45 peak	$.45 off-peak

Active Additional Services: Caller ID Service - Voice Mail Access Charge

Monthly Access Charges

		Amount
Monthly Access	from 10/26/03 to 11/25/03	20.00
Total Monthly Access Charges		**$20.00**

Home Usage and Charges

	Peak	Off-Peak	Amount
Current Month's Airtime Usage			
Airtime (Minutes)	185	82	
Weekend/Night Feature Minutes	0	56	Included
Mobile to Mobile Allowance Minutes	42	26	Included
Shared Allowance Minutes	89	0	Included
Current Month's Billable Airtime	**54**	**0**	
Current Month's Airtime Charges	**24.30**	**0.00**	**$24.30**
Other Call Charges			
411 Connect			1.25
Total Home Usage and Charges			**$25.55**

Verizon Wireless' Other Charges and Credits

	Amount
Fed Universal Service Charge	.76
Regulatory Charge	.05
Total Verizon Wireless' Other Charges and Credits	**$.81**

Taxes, Governmental Surcharges and Fees

	Amount
MA Wireless E911 Srvc Surchg	.30
Federal Tax	**1.39**
State Tax:	
MA State Sales Tax	2.32
Total State Tax	**2.32**
Total Taxes, Governmental Surcharges and Fees	**$4.01**

Total Current Charges for Wireless Number (339) 832- $50.37

verizonwireless

Account Number.....
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Wireless Details for (339) 832- Susan M

Home Area

#	Date	Time	Rate Period	Call Origination+	Called Phone Number	Call Destination		Minutes	Usage Type	Home Airtime Charges	Other Call Type	Other Call Charges	Total Charges
1	09/26	10:55A	P	Home Area	(617) 598-	Boston	MA	6	A	Included		.00	.00
2	09/26	11:00A	P	Home Area	(908) 604-	Millington	NJ	2	A	Included		.00	.00
3	09/26	11:15A	P	Home Area	(202) 736-	Washington	DC	7	A	Included		.00	.00
4	09/26	07:08P	P	Home Area	(339) 832-	Mobile		2	MN	Included		.00	.00
5	09/26	07:10P	P	Home Area	(781) 294-	Bryantvl	MA	1	A	Included		.00	.00
6	09/26	07:21P	P	Home Area	(339) 832-	Mobile		2	MN	Included		.00	.00
7	09/26	08:21P	P	Home Area	(339) 832-	Incoming	CL	2	MN	Included		.00	.00
8	09/26	09:01P	O	Home Area	(781) 294-	Bryantvl	MA	1	W	Included		.00	.00
9	09/26	09:01P	O	Home Area	(339) 832-	Mobile		2	MN	Included		.00	.00
10	09/26	09:24P	O	Home Area	(339) 832-	Mobile		2	MN	Included		.00	.00
11	09/26	09:26P	O	Home Area	(339) 832-	Mobile		1	MN	Included		.00	.00
12	09/26	09:33P	O	Home Area	(339) 832-	Incoming	CL	1	MN	Included		.00	.00
13	09/26	09:35P	O	Home Area	(339) 832-	Mobile		2	MN	Included		.00	.00
14	09/27	01:37P	O	Home Area	(339) 832-	Mobile		1	RMN	Included		.00	.00
15	09/27	02:46P	O	Home Area	(339) 832-	Mobile		1	RMN	Included		.00	.00
16	09/27	02:48P	O	Home Area	(781) 294-	Bryantvl	MA	1	W	Included		.00	.00
17	09/27	03:19P	O	Home Area	(339) 832-	Mobile		1	MN	Included		.00	.00
18	09/29	07:45A	P	Home Area	(781) 294-	Bryantvl	MA	2	A	Included		.00	.00
19	09/29	08:21A	P	Home Area	(339) 832-	Mobile		1	RMN	Included		.00	.00
20	09/29	08:22A	P	Home Area	(339) 832-	Mobile		2	RMN	Included		.00	.00
21	10/01	07:24P	P	Home Area	(781) 294-	Bryantvl	MA	3	A	Included		.00	.00
22	10/02	07:40P	P	Home Area	(508) 746-	Plymouth	MA	2	A	Included		.00	.00
23	10/02	07:42P	P	Home Area	(508) 778-	Hyannis	MA	2	A	Included		.00	.00
24	10/02	07:43P	P	Home Area	(781) 294-	Bryantvl	MA	1	A	Included		.00	.00
25	10/03	05:18P	P	Home Area	(781) 294-	Bryantvl	MA	1	A	Included		.00	.00
26	10/03	05:19P	P	Home Area	(781) 293-	Bryantvl	MA	1	A	Included		.00	.00
27	10/03	05:22P	P	Home Area	(781) 293-	Bryantvl	MA	3	A	Included		.00	.00
28	10/03	05:28P	P	Home Area	(203) 757-	Waterbury	CT	1	A	Included		.00	.00
29	10/03	05:58P	P	Home Area	(781) 294-	Bryantvl	MA	2	A	Included		.00	.00
30	10/03	06:11P	P	Home Area	(781) 293-	Bryantvl	MA	2	A	Included		.00	.00
31	10/03	06:19P	P	Home Area	(781) 294-	Bryantvl	MA	1	A	Included		.00	.00
32	10/03	08:44P	P	Home Area	(781) 294-	Bryantvl	MA	2	A	Included		.00	.00
33	10/03	09:22P	O	Windham /A CT	(781) 294-	Bryantvl	MA	1	W	Included		.00	.00
34	10/04	08:56A	O	New Have/A CT	(781) 294-	Bryantvl	MA	7	W	Included		.00	.00
35	10/04	10:41A	O	New Have/A CT	(860) 274-	Watertown	CT	3	W	Included		.00	.00
36	10/04	01:28P	O	New Have/A CT	(339) 832-	Kingston	MA	4	MN	Included		.00	.00
37	10/04	03:32P	O	New Have/A CT	(781) 294-	Bryantvl	MA	5	W	Included		.00	.00
38	10/04	09:16P	O	New Have/A CT	(781) 294-	Bryantvl	MA	1	W	Included		.00	.00
39	10/04	09:18P	O	New Have/A CT	(339) 832-	Kingston	MA	5	MN	Included		.00	.00
40	10/04	09:23P	O	New Have/A CT	(339) 832-	Incoming	CL	7	W	Included		.00	.00
41	10/05	11:13A	O	New Have/A CT	(781) 294	Bryantvl	MA	1	W	Included		.00	.00
42	10/05	11:14A	O	New Have/A CT	(339) 832-	Kingston	MA	3	MN	Included		.00	.00
43	10/05	11:41A	O	New Have/A CT	(203) 757-	Waterbury	CT	1	W	Included		.00	.00
44	10/05	11:43A	O	New Have/A CT	(860) 274-	Watertown	CT	2	W	Included		.00	.00
45	10/05	03:04P	O	Hartford/A CT	(339) 832-	Kingston	MA	1	MN	Included		.00	.00
46	10/05	04:23P	O	Home Area	(339) 832-	Mobile		2	MN	Included		.00	.00
47	10/06	08:51A	P	Home Area	(617) 598-	Boston	MA	2	A	Included		.00	.00
48	10/06	06:13P	P	Home Area	(781) 294-	Bryantvl	MA	1	A	Included		.00	.00
49	10/07	08:53A	P	Home Area	(000) 000-	Operator		1	A	Included		.00	.00

Account Number..... [illegible]
Invoice Number..... 3[illegible]0
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Home Area

#	Date	Time	Rate Period	Call Origination+	Called Phone Number	Call Destination		Minutes	Usage Type	Home Airtime Charges	Other Call Type	Other Call Charges	Total Charges
50	10/08	04:27P	P	Home Area	(339) 832-	Mobile		1	RMN	Included		.00	.00
51	10/08	06:14P	P	Home Area	(339) 832-	Incoming	CL	2	MN	Included		.00	.00
52	10/09	06:22P	P	Home Area	(339) 832-	Mobile		1	MN	Included		.00	.00
53	10/09	06:43P	P	Home Area	(339) 832-	Incoming	CL	2	MN	Included		.00	.00
54	10/09	06:45P	P	Home Area	(339) 832-	Mobile		2	MN	Included		.00	.00
55	10/09	06:56P	P	Home Area	(339) 832-	Mobile		2	MN	Included		.00	.00
56	10/09	08:03P	P	Home Area	(339) 832-	Mobile		3	MN	Included		.00	.00
57	10/09	09:15P	O	Home Area	(781) 826-	Hanover	MA	1	W	Included		.00	.00
58	10/10	03:10P	P	Home Area	(781) 585-	Kingston	MA	2	A	Included		.00	.00
59	10/10	07:02P	P	Home Area	(781) 294-	Bryantvl	MA	1	A	Included		.00	.00
60	10/10	07:37P	P	Home Area	(781) 294-	Bryantvl	MA	2	A	Included		.00	.00
61	10/13	06:31P	P	Home Area	(781) 294-	Bryantvl	MA	3	A	Included		.00	.00
62	10/13	06:49P	P	Home Area	(781) 294-	Bryantvl	MA	1	A	Included		.00	.00
63	10/14	03:13P	P	Home Area	(781) 294-	Bryantvl	MA	2	A	Included		.00	.00
64	10/14	03:53P	P	Home Area	(000) 000-	411connect	MA	2	A	Included	LL	1.25	1.25
65	10/14	03:54P	P	Home Area	(781) 792-	Rockland	MA	1	A	Included		.00	.00
66	10/15	09:12A	P	Home Area	(617) 227-	Boston	MA	1	A	Included		.00	.00
67	10/15	06:58P	P	Tampacnt/B FL	(301) 717-	Silver Spg	MD	3	MN	Included		.00	.00
68	10/15	07:50P	P	Stpeters/B FL	(781) 294-	Bryantvl	MA	2	A	Included		.00	.00
69	10/15	09:51P	O	Stpeters/B FL	(781) 294-	Bryantvl	MA	5	W	Included		.00	.00
70	10/15	09:57P	O	Stpeters/B FL	(781) 294-	Bryantvl	MA	4	W	Included		.00	.00
71	10/15	10:02P	O	Stpeters/B FL	(781) 294-	Bryantvl	MA	3	W	Included		.00	.00
72	10/16	10:10A	P	Stpeters/B FL	(617) 227-	Boston	MA	4	A	Included		.00	.00
73	10/16	10:14A	P	Stpeters/B FL	(781) 294-	Bryantvl	MA	2	A	Included		.00	.00
74	10/16	12:42P	P	Stpeters/B FL	(617) 598-	Boston	MA	3	A	Included		.00	.00
75	10/16	12:45P	P	Stpeters/B FL	(617) 598-	Boston	MA	5	A	Included		.00	.00
76	10/16	03:14P	P	Stpeters/B FL	(404) 964-	Atlanta	GA	3	A	Included		.00	.00
77	10/16	05:22P	P	Stpeters/B FL	(617) 598-	Boston	MA	3	A	Included		.00	.00
78	10/16	05:25P	P	Stpeters/B FL	(908) 604-	Millington	NJ	2	A	Included		.00	.00
79	10/16	05:27P	P	Stpeters/B FL	(404) 964-	Atlanta	GA	1	A	Included		.00	.00
80	10/16	05:28P	P	Stpeters/B FL	(781) 294-	Bryantvl	MA	7	A	.45		.00	.45
81	10/16	10:12P	O	Stpeters/B FL	(781) 294-	Bryantvl	MA	8	W	Included		.00	.00
82	10/16	10:20P	O	Stpeters/B FL	(781) 293-	Bryantvl	MA	3	W	Included		.00	.00
83	10/17	07:38A	P	Stpeters/B FL	(339) 832-	Kingston	MA	2	MN	Included		.00	.00
84	10/17	11:51A	P	Tampacnt/B FL	(781) 294-	Bryantvl	MA	1		.45		.00	.45
85	10/17	11:51A	P	Tampacnt/B FL	(339) 832-	Kingston	MA	1	MN	Included		.00	.00
86	10/17	12:40P	P	Tampacnt/B FL	(781) 294-	Bryantvl	MA	1		.45		.00	.45
87	10/17	12:59P	P	Tampacnt/B FL	(339) 832-	Incoming	CL	3	MN	Included		.00	.00
88	10/17	01:31P	P	Tampacnt/B FL	(617) 598-	Boston	MA	7		3.15		.00	3.15
89	10/17	01:38P	P	Tampacnt/B FL	(313) 390-	Detroit	MI	2		.90		.00	.90
90	10/17	01:39P	P	Tampacnt/B FL	(203) 550-	Stamford	CT	2		.90		.00	.90
91	10/17	01:42P	P	Tampacnt/B FL	(617) 227-	Boston	MA	4		1.80		.00	1.80
92	10/17	02:36P	P	Tampacnt/B FL	(339) 832-	Voice Mail	CL	2	RM	.90		.00	.90
93	10/17	02:41P	P	Tampacnt/B FL	(339) 832-	Kingston	MA	2	MN	Included		.00	.00
94	10/17	02:43P	P	Tampacnt/B FL	(339) 832-	Voice Mail	CL	5	RM	2.25		.00	2.25
95	10/17	02:47P	P	Tampacnt/B FL	(617) 598-	Boston	MA	2		.90		.00	.90
96	10/17	02:51P	P	Tampacnt/B FL	(339) 832-	Incoming	CL	4	MN	Included		.00	.00
97	10/17	03:27P	P	Tampacnt/B FL	(781) 294-	Bryantvl	MA	2		.90		.00	.90
98	10/17	06:51P	P	Cincinna/A OH	(781) 294-	Bryantvl	MA	2		.90		.00	.90
99	10/17	09:40P	O	Home Area	(781) 294-	Bryantvl	MA	1	W	Included		.00	.00

verizonwireless

Account Number.....
Invoice Number ..... 3[illegible]0
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Home Area

#	Date	Time	Rate Period	Call Origination+	Called Phone Number	Call Destination		Minutes	Usage Type	Home Airtime Charges	Other Call Type	Other Call Charges	Total Charges
100	10/18	03:01P	O	Home Area	(781) 294	Bryantvl	MA	1	W	Included		.00	.00
101	10/20	08:34A	P	Home Area	(203) 550	Stamford	CT	1		.45		.00	.45
102	10/20	08:35A	P	Home Area	(339) 832-	Incoming	CL	1		.45		.00	.45
103	10/20	08:37A	P	Home Area	(203) 341-	Westport	CT	2		.90		.00	.90
104	10/20	08:38A	P	Home Area	(339) 832-	Incoming	CL	7	C	3.15		.00	3.15
105	10/20	08:53A	P	Home Area	(781) 294-	Bryantvl	MA	1		.45		.00	.45
106	10/20	06:58P	P	Home Area	(339) 832-	Mobile		2	RMN	Included		.00	.00
107	10/20	07:06P	P	Home Area	(781) 294-	Bryantvl	MA	3		1.35		.00	1.35
108	10/20	07:15P	P	Home Area	(339) 832-	Mobile		1	MN	Included		.00	.00
109	10/21	05:24P	P	Home Area	(339) 832-	Mobile		1	MN	Included		.00	.00
110	10/22	08:14A	P	Home Area	(339) 832-	Incoming	CL	1		.45		.00	.45
111	10/22	09:07A	P	Home Area	(781) 294-	Bryantvl	MA	1		.45		.00	.45
112	10/22	06:24P	P	Home Area	(781) 294-	Bryantvl	MA	4		1.80		.00	1.80
113	10/23	02:25P	P	Home Area	(781) 294-	Bryantvl	MA	1		.45		.00	.45
114	10/23	02:25P	P	Home Area	(339) 832-	Mobile		1	MN	Included		.00	.00
115	10/24	02:56P	P	Home Area	(781) 294-	Bryantvl	MA	1		.45		.00	.45

+Designates the location, city and state, of the cell tower or switching center which processed the call.

Legends:			
Rate Period	**O** = Off-Peak	**P** = Peak	
Usage Type	**A** = Price Plan Allowance **C** = Call Waiting	**M** = Mobile to Mobile **N** = Mob to Mob Allow Mins	**R** = Voice Mail Retrieval **W** = Wknd/Nght Feature Mins
Other Call Type	**LL** = Landline		

Control #

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Verizon Wireless News

Returned Payments

In the event your check for payment of your wireless bill is returned by your bank for insufficient or uncollected funds, Verizon Wireless may resubmit your check electronically to your bank for payment from your checking account.

WIRELESS LOCAL NUMBER PORTABILITY.

Effective November 24th, you may be able to take your current wireless telephone number to another service provider if you terminate service with Verizon Wireless. This is called porting your number. If you request your new service provider to port any number from Verizon Wireless, and we receive your request, we will treat this as notice from you to terminate your service for that number. Termination will be effective on the date that the porting process is successfully completed. You will be responsible for all accrued charges and any applicable early termination fee. Further information can be found at our website www.verizonwireless.com.

Good news for Roadside Assistance customers.

Effective immediately, the towing allowance is increased from 3 miles to 10 miles. Also, effective with the November bill, for customers currently paying $2.95 per month, the rate will be changed to $2.99 per month.

Long Distance Charges.

Effective as of October 1st, the rate for calls to Guam and the Commonwealth of Northern Marianas Islands (CNMI) will be $0.20 per minute in addition to standard airtime charges. Further, as of that date, calls to Guam and the CNMI no longer will be treated international. Simply dial the applicable 10 digit telephone number using your Verizon Wireless phone. For more information about long distance rates go to www.verizonwireless.com.

Attachment 5

NRRI consumer awareness study

Consumers Often Unaware They Can Choose a Local Telephone Company

The National Regulatory Research Institute (NRRI) releases results from its Consumer Utility Benchmark Survey.

Columbus, Ohio, May 1, 2003 – Consumers nationwide are largely unaware of their ability to choose local telephone providers, according to an NRRI survey on utility and telecommunications service. Local markets were opened to competition seven years ago, and the Federal Communications Commission (FCC) reported in June 2002 that 93 percent of U.S. households lived in a zip code served by at least one competitor. Yet only 36 percent of the respondents to the NRRI Consumer Utility Benchmark Survey said they were able to choose their local telephone company.

Response	Early Approval States	Rest of United States
Yes	49.6%	36.0%
No	31.6%	44.7%
Don't know, uncertain	18.8%	19.3%

Source: NRRI/BIG research Consumer Utility Benchmark Survey

For further analysis, the responses to the survey were divided into two groups – states in which the FCC granted a Bell operating company the ability to go into in-state long distance at least one year prior to the survey and all other states. The "early approval" states, granted "interLATA" relief by the FCC under Section 271 of the Telecommunications Act of 1996, are New York, Texas, Kansas, Oklahoma, Massachusetts, Pennsylvania, Arkansas and Missouri. The Bell companies had to demonstrate the in-state local markets were irreversibly open to competition as a condition of the approval under Section 271, so competition may be somewhat more

firmly established than in other states overall. Close to half the respondents to the CUBS survey from the "early approval" states said they can choose their telephone company. Nonetheless, the result that over half of consumers in states that received early approval under Section 271 said they could not choose the local service provider or didn't know whether they could is puzzling.

"Consumers cannot reap the benefits of a competitive environment if they are not aware of their ability to choose telecommunications providers," said Chairman Paul Vasington of the Massachusetts Department of Telecommunications and Energy. "The results of the survey suggest there is considerable room for more consumer education on their ability to choose a telephone company. It also suggests companies competing with the incumbents for local customers need to ramp up their marketing efforts."

A total of 18,793 Internet users offered opinions on their utility service quality in a survey conducted by the National Regulatory Research Institute and BIGresearch between Jan. 9, 2003, and Feb. 3, 2003. The purpose of the survey was to provide state public utility commissions, utilities, telecommunications industries and other stakeholders with insights into consumer perceptions of utility service, as well as the impact of competition on consumer perceptions of utility service and prices.

For other results, go to the NRRI home page at www.nrri.ohio-state.edu.

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Attachment 6

Excerpt from Bolton, Patrick;
Brodley, Joseph; Riordan, Michael,
Predatory Pricing: Strategic Theory and Legal Policy

PREDATORY PRICING:

STRATEGIC THEORY AND LEGAL POLICY

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We have received valuable comments from legal workshop participants at Boston University Law School, Harvard Law School, Yale Law School; and from economic workshop participants at the Antitrust Division, U.S. Dept. of Justice, European Centre for Advanced Research in Economics (ECARE), European Summer Symposium in Economic Theory at Gerzensee, N.Y.U. School of Management, New Zealand Institute for Antitrust Law and Economics, Princeton University, and Tilburg University Centre for Economic Research. We have also received insightful comments from many individuals, including Lucien Bebchuk,, Mathias Dewatripont, Einer Elhauge, Vic Khanna, Louis Kaplow, Alvin Klevorick, Barry Nalebuff, Jim Meeks, Patrick Rey, Alan Schwartz, Marius Schwartz, Dan Vincent, and Bobby Willig. We thank LeeAnne Baker, Jeremy Bartell, Gretchen Elizabeth Joyce and Chad Porter for dedicated and resourceful research assistance.

In reputation effect predation the predator reduces price in one market to induce the prey and potential entrants to believe that predator will cut price in other markets or in the predatory market at a later time. The predator seeks to establish a reputation as a price cutter, based on some perceived special advantage or characteristic. Thus, a predator trying to establish a reputation for financial predation cuts price when it has superior financial resources (and when the other conditions for financial predation are present). Observing this conduct, a rival in another market or a potential entrant rationally believes that there is a greater probability that the predator will engage in financial predation in the other market, or in the same market at a later time if entry occurs. This reputation-induced belief reduces the future entrant's expected return and may deter entry. We discuss reputation effect below. In Part VI we discuss demand signaling and cost signaling.

B. *Reputation Effect Predation*

Reputation effects may be present when the predator sells in two or more markets or in successive time periods within the same market. In such situations one market or time period may serve as a demonstration market, where the predator engages in overt predatory conduct, and the other market or time period provides the recoupment market, where the predator reaps the benefits from its predatory plan. The predator establishes a reputation for aggressive conduct in the demonstration market that induces potential entrants to believe that it will price aggressively in the future when faced with new competition. This raises entry barriers, allowing the predator to increase prices in the recoupment market.

Although economic theory views reputation effect predation as a separate and distinct

predatory strategy, a reputation effect theory based on irrational toughness may be too easy to assert and too difficult to prove. Therefore, we would limit antitrust enforcement to cases where the reputation effect augments or intensifies another, more concrete predatory program. In these instances reputation predation projects the immediate anticompetitive consequences of a main predatory strategy, e.g. financial market predation or cost signaling, into other markets or other time periods. By linking reputation effect with a main predatory strategy we also illustrate that the two strategies combined are even more powerful and plausible than when considered in isolation.

1. *Economic Theory*

When a predator faces future rivals, an additional benefit of predatory conduct against a current rival may be to discourage entry. Indeed, prevention of future entry constitutes the paradigm case of reputation effect predation. By engaging in predatory pricing against current rivals the predator can acquire a reputation of being a "tough" competitor — not irrationally tough, but tough in the sense of projecting a perceived strategic advantage, for example lower costs, into other markets or time periods. Faced with the prospect of dealing with such a "tough" competitor, an existing rival and particularly a recent entrant, may be induced to exit, potential entrants may be deterred from entering, and financiers discouraged from backing either existing or future rivals.[188] The incumbent's predatory

[188] The behavioral dynamic works as follows. Potential entrants perceive a risk that an incumbent that has once engaged in predation will again lower price if further entry attempts occur. Entrants observe that the predator has already evidenced a "tough" approach to entry, and thus conclude that there is some probability that the predator will be tough in the future. If a second entry attempt occurs and predator again cuts price, potential entrants will now update and increase their probability assessment that predator is "tough" The predator knows that entrants will act in this way, which in turn increases predator's incentive to remain tough. Moreover, if the predator is not the only firm remaining in the market, its rivals have an incentive also to act "tough" even if that is not their nature, so as

reputation can then serve as an exclusionary mechanism protecting monopoly profits. We discuss reputation effect predation in the context of financial predation, but a reputation effect strategy can augment any main predatory strategy.

2. *Reputation and Financial Predation*

Reputation effects enhance the profitability of financial predation by making entry or re-entry less likely. Future potential entrants observing the failure of the current entrant, can only be more cautious in contemplating entry, whether or not they recognize the predatory nature of the price cutting. If potential entrants recognize that predatory pricing has caused the current rival's exit, fear of facing a similar fate may deter their entry. If potential entrants do *not* recognize that predatory pricing caused the current rival's exit, they may simply conclude that entry is less profitable than they previously thought.[189] Moreover, in either case future entrants will face a harder problem convincing customers to switch since customers are now more likely to believe that the new entrant will experience a similar outcome. Clearly, an entrant will find it more difficult in these circumstances to convince lenders to finance its project.

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to avoid being perceived as "soft," and willing to accommodate entry. Thus, reputation effect, which may be combined with other predatory strategies, as we propose, shows how predation can act as an entry or reentry barrier. *See* David Kreps and Robert Wilson (1982), *supra* note __ at 253; Paul Milgrom & John Roberts (1982), *supra* note _ at 303.

[189] A formal model showing how entrants are deterred from entering a new market when they see current entrants fail , even though they do not observe the predatory action, can be found in Rafael Rob, *Learning and Capacity Expansion Under Demand Uncertainty*, 58 REV. ECON. STUDIES 655 (1991). This model relies on the idea that potential entrants do not know exactly how profitable the new market is and attempt to learn general market conditions from the performance of current entrants. As Rob, Kreps et al. and Milgrom-Roberts, *supra* note—point out, it is critical that some characteristics of incumbent firms be private information for reputation effects to emerge when entrants do not observe the predatory action. Such characteristics might be an unknown cost advantage (as illustrated below), a secret marketing plan, the manager's hidden agenda, etc. The basic point is that there are a wide variety of reasons why an incumbent firm might want to meet new competition by pricing aggressively. Any of these can provide the foundation for a reputation effect.

In addition, a reduced likelihood of entry may also have anticompetitive effects on the predator's existing rivals. Far from making the current rival's position more secure, the reduced probability of entry may actually hasten the current rival's exit, and this may more than offset any gain to current rivals from increased entry barriers. This result may occur because the reduction in the number of potential entrants means there will be fewer prospective buyers for the victim's assets if it fails to meet its loan commitments. The victim's financiers may then project a lower liquidation value for their holdings, and this in turn may induce the financiers to impose more severe liquidation terms, other things being equal.[190] To break even the financiers must now raise their repayment terms to offset the fall in expected liquidation value. But higher repayment requirements then require a tougher and less flexible liquidation policy because they intensify the moral hazard risks the lender faces.[191]

Nor does the chain store paradox prevent a reputation effect strategy for financial predation (or other signaling strategy). As long as there is no well defined final period, or the precise business motive behind the incumbent's aggressive pricing is not perfectly known, the "chain store paradox logic" breaks down.[192] Under these conditions entrant cannot exclude the possibility that aggressive pricing by incumbent may be an efficient business practice, as opposed to a predatory move, and hence

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[190] *See generally* Bolton & Scharfstein (1990), *supra* note _____.

[191] That is to say, higher repayment requirements lower the entrepreneur's anticipated profit from successful operation, reducing the return to effort and inducing shirking and other moral hazard effects. *See supra* text accompanying notes ___.

In addition, and somewhat perversely, if the predatory victim decides *not* to exit, but instead tries to fight through the price war, it faces further reputational problems that may inhibit financing. Potential entrants and bystanders may interpret the victim's survival as indicating that the industry is profitable. This in turn may trigger new entry, making the market more competitive and reducing the victim's expected return. The final result may be that the victim's financiers, perceiving the victim to face increased competition, withdraw their financial support sooner.

[192] For more detailed discussion *see infra* text accompanying notes ____.

reputation effects may be present.[193]

In sum reputation effects may enhance the power of financial predation whenever the predator faces successive entry, whether in a single market or across multiple markets. In such a situation the predatory action has a demonstration effect, which increases the predator's payoff, and at the same time lowers the existing rival's payoff from attempting to ride out the price war.[194]

3. *Proof of Reputation Effect Strategy*

Proof of a reputation effect strategy would require a showing of the following essential preconditions.

(1). *The predator, a dominant multi-market firm, faces localized or product-limited competition or potential competition; or alternatively, operating within a single market, the predator faces probable successive entry over time*. Reputation effect predation always involves two markets or two time periods: a demonstration market, where the overt predatory conduct occurs, and a recoupment market (or later time period), where the reputation consequences follow. The predator exhibits its predatory character (e.g. its feigned low costs) in the demonstration market (or current time period) in order to induce the victim and potential entrants to believe that predator will cut price in another market (or later time period), thereby injuring actual or potential competition.

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[193] As Kreps & Wilson (1982), *supra* note __ at 254, have forcefully demonstrated, the prey need only believe that there is a small probability that the aggressive pricing rests on real economic advantage to establish a strong reputation effect that increases future barriers to entry.

[194] In a separate discussion paper we show how a reputational effect can also enhance the power of a price signaling strategy. *See* Patrick Bolton, Joseph F. Brodley & Michael H. Riordan, Predatory Pricing: Strategic Theory and Legal Policy, Princeton University Discussion Paper (1999).

(2). *The alleged reputation effect reinforces an identified predatory strategy pursued by the predator, such as financial market predation, cost signaling, or test market predation*. Reputation predation never stands alone in our proposal. Instead it serves as an augmenting or aggravating factor which intensifies a main predatory strategy. We thus avoid the more controversial use of the reputation effect theory, which would allow a predator to establish a predatory reputation based on projecting a slightly irrational "toughness." In our usage reputation effect predation always involves a projection of the immediate anticompetitive consequences of financial market predation or other predatory strategy from the demonstration market into other markets or time periods.

(3). *The predator deliberately pursues a reputation effect strategy*. To prevent the legal rule from being over inclusive it is also necessary to show that the predator knowingly adopted a reputation effect strategy. Evidence tending to prove knowing adoption includes: (1) proof of a corporate plan to engage in reputation predation, (2) publicizing or disseminating information likely to induce a reputation effect, such as information showing failure of new entry in a particular sub-market due to price cutting by the predator, (3) suppression of information that might reveal bluffing by the predator, for example the payment of large amounts to settle a predatory pricing suit (particularly if the settlement amount is secret), or to acquire a complaining victim in the demonstration market, and, perhaps most importantly, (4) repetition of the predatory action in multiple markets or over successive time periods, which strengthens the competition-reducing belief the predator seeks to induce.

(4). *The potential entrant victim observes the exit or other adverse effect experienced by the predator's existing rival in the demonstration market; and such knowledge is to be presumed*

if it is commonly known in the industry. Finally, the potential entrant victim must observe the adverse effects of the predatory conduct in the demonstration market if its future competition is to be inhibited. Note that the potential entrant need not be aware that a predatory strategy has caused these effects. It is sufficient if the potential entrant simply knows that the predator's existing rival has been forced from the market or has suffered other serious economic harm. Exclusion or other economic injury to the predator's existing rival is bad news for the potential entrant, even when the cause is not known, since it likely indicates low market profitability.[195] Knowledge that the predator's existing rival has left the market or sustained serious injury can be presumed if it is commonly known in the industry.

4. *Illustration: Entry into Local Telephone Market*

Two recent case studies,[196] involving entry into local telephone markets during the formative period of the Bell Telephone system, illustrate the strategic approach to reputation predation. While these examples occurred some time ago, they have modern implications because they involved a network industry in which failure of initial competition led to long enduring monopoly (later sustained by regulation). We focus on the efforts of an independent telephone company to enter the local market in Madison, Wisconsin in competition with the established Bell System company.[197]

(i) ***Factual Summary***

Wisconsin Telephone [hereafter "Bell"] entered the Madison market in 1879. Sixteen years later, after the Bell patents had expired, an independent telephone company, Dane County Telephone

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[195] *See supra* text accompanying notes ___.

[196] David Gabel & David I. Rosenbaum, *Prices, Costs, Externalities and Entrepreneurial Capital: Lessons from Wisconsin*, 40 ANTITRUST BULL. 581 (Fall, 1995) [hereafter *Gabel & Rosenbaum*]; David F. Weiman & Richard C. Levin, *Preying for Monopoly? The Case of Southern Bell Telephone Co.*, 102 J. POL. ECON. 103 (1994).

[197] *See Gabel & Rosenbaum, supra* note __ at 587.

(the "entrant") sought to enter. The market appeared attractive for entry because Bell had obtained only 236 customers, and these customers appeared far from satisfied. Customers had complained of high prices and poor service, but Bell was unresponsive. Founded by local citizens and politically well connected with organizers, who included Robert LaFollette, later Governor, Senator and a Presidential candidate, entrant offered service at only one-half the price previously charged by Bell. After only seven months entrant had signed up 400 customers on three-year contracts, 140 more than Bell had recruited in 15 years. Entrant was well managed, offered good service and from the beginning attempted to integrate the local telephone service into state and regional markets, and eventually the national market.[198]

Bell responded by cutting price drastically. Indeed, three months before entrant began service Bell reduced price by 25 percent. In the three months following entry Bell reduced its rates to one-quarter of their original level and offered free service to the city government, railroads, many other businesses, and indeed to any existing Bell customer who would agree not to remove its Bell telephone.[199]

Despite these inducements, entrant continued to thrive. After three years entrant had 850 customers to Bell's 240. After ten years entrant provided service to 2500 Madison subscribers, while Bell served only 900. Expanding into the 30 mile radius around Madison, entrant served 3500 additional subscribers to Bell's 250. Thus entrant now served 7000 customers in the greater Madison region to Bell's 1150, increasing its relative market share. But entrant's success was not assured. It realized its future depended on construction of a full toll network connecting with regional and national

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[198] *See id.* at 590.
[199] *See id.* at 591.

markets. Lack of capital constrained these plans. Entrant had consumed its existing liquid capital in upgrading and expanding its local network and had difficulty in raising additional funds.[200]

Entrant's financial problems were substantially caused by Bell's low pricing policies and other efforts to block entrant's financing.[201] Bell maintained its low rates in Madison (and other competitive markets) at levels almost surely below its long run average incremental cost,[202] which is the correct measure of avoidable costs for dynamically expanding high sunk cost industries, such as telephone markets, where short run marginal costs may be close to zero.[203] Stymied in its efforts to raise additional funds, entrant was able to pay a dividend of only about one percent a year. After 13 years of operations, entrant sold out to Bell at a price that was substantially below its shareholders' investment cost.[204] The buyout of local competitors on terms that would discourage further entry was a practice followed elsewhere by the Bell System.[205]

The problems the entrant faced in Madison confronted other independent telephone companies. Bell followed similar pricing practices in other sections of the country, including Ohio, Illinois, Upstate New York and the Southern United States. Such practices tended to deprive entrants in local telephone markets of the cash flow needed to finance expansion.[206] Thus, when another independent

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[200] *See id.* at 594.

[201] For example, Bell pursued a public relations campaign to undermine the financial viability of independent telephone companies. David Joshua Gabel, The Evolution of a Market: The Emergence of Regulation in the Telephone Industry of Wisconsin, 1893-1917, Ph.D. dissertation (University of Wisconsin, 1987) [hereafter *Gabel Ph.D. Dissertation*], pp. 157, 169.

[202] *See Gabel Ph.D. Dissertation* , *supra* note __, at 153-154, Weiman & Levin, *supra* note __, at 112. These authors state that price was below the local Bell company's average operating costs, including equipment rental charges from the parent, American Bell (*see Gabel Ph.D. Dissertation*, *supra* note _ 149-150).

[203] *See* MCI Comm. Corp. v. AT&T, 708 F.2d 1081 (7th Cir. 1981), *cert. denied*, 464 U.S. 891 (1983); 3 AREEDA AND HOVENKAMP, ANTITRUST LAW ¶741e2.

[204] Entrant sold its assets to Bell, shortly after telephone industry in Wisconsin was brought under state public utility regulation in 1907. Bell has lobbied hard for state regulation to gain protection from competition.

[205] See Weiman & Levin, *supra* note ___, at 119.

[206] *See Gabel & Rosenbaum*, *supra* note ____, at 606; Weiman & Levin, *supra* note ___, at 116.

telephone company obtained a franchise and sought to construct a rival telephone network in Milwaukee, the organizers found they were unable to raise the needed capital.[207]

(ii) ***Proof of Case***

Reputation effect predation potentially provides a supplemental basis for establishing a predatory scheme and probable recoupment. Therefore, we confine our discussion to proof of these elements.[208]

(A) SCHEME OF PREDATION AND SUPPORTING EVIDENCE

The evidence showed that each of the preconditions for reputation effect predation was present.

(1). *The predator, a dominant multi-market firm, faces localized or product-limited competition or potential competition; or alternatively, operating within a single market, the predator faces successive entry over time*.

The predator, Wisconsin Bell, was the dominant multi-market firm in Wisconsin. No other company had Bell's widespread network and presence in multiple Wisconsin markets. Bell held a monopoly in Wisconsin's major city, Milwaukee, as it did in most major U.S. cities. At the same time

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[207] *See Gabel Ph.D. Dissertation*, *supra* note _ at 247-54. Bell also took other steps to discourage financing of the Milwaukee group, including contacting J.P. Morgan, the Bell System investment banker, to deny the group access to Eastern financial markets. *Id*.

[208] Most of the other elements of proof appear to be readily satisfied, and in any event pose no unique problems not previously discussed. The market structure facilitated predation. Bell held a monopoly in the relevant Madison market. There were entry and reentry barriers, evidenced by high sunk costs and the absence of new entry after Bell had acquired its only existing rival, which itself never attempted to reenter the market. This might of course be explained in Madison by the fact that Bell maintained its low price for several years. But relevant to the reputation effect, entry did not occur in other markets, such as Milwaukee, where price had *not* been reduced. As for the remaining elements, price was clearly below at least some measure of incremental cost in a dynamically expanding industry where AVC would have been a singularly poor cost standard, and the economic case studies suggest no business justification for the below cost pricing.

the Bell system faced localized competition in many of its Wisconsin markets, centered in small to moderate sized communities. At one point Bell faced actual competition in 50 percent of its local Wisconsin markets and potential competition in many more. In these communities, as in Madison, Bell had held a monopoly of telephone service prior to independent entry. While there was some coordination of entry by independent telephone companies into individual cities, entry did not occur simultaneously, but over time, dependent on the action of local groups.

(2). *The alleged reputation effect reinforces an identified predatory strategy pursued by the predator, such as financial market predation, cost signaling, or test market predation*.

Bell's price cutting practices appeared to reflect a strategy of financial market predation, reinforced by a reputation effect. Entrant was cash constrained and dependent on outside financing for expansion. Bell's price cutting tactics threatened entrant's viability since future success depended on expanding its network connections beyond the local area. Bell was surely aware of this financial need, since it faced large capital requirements itself in expanding its network. Clearly Bell could finance predation internally, continuing to pay a healthy dividend throughout the predatory period.[209]

(3). *The predator deliberately pursues a reputation effect strategy*.

Several factors support the conclusion that Bell deliberately pursued a reputation effect strategy. First, Bell held its Madison rates below cost for 13 years[210] — conduct which appears inexplicable in absence of an anticipated reputation effect. Second, Bell followed a conscious strategy of buying out independents only at low prices that would discourage new entry.[211] Third, Bell pursued

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[209] *See Gabel & Rosenbaum, supra* note ____, at 604.
[210] *See Gabel Ph.D. Dissertation, supra* note __ at 153-54.
[211] *See Gabel & Rosenbaum, supra* note __, at 607.

other exclusionary tactics that would have enhanced its predatory reputation, including a public relations campaign that implied that the independents were not financially solvent, made wasteful investments and were overcapitalized; denial of interconnection with the Bell system even to non-competitive independent companies; attempts to influence local regulatory policies to weaken rivals; and at least in other sections of the country, expansion ahead of demand.[212] Thus, it appears that Bell sought to discourage independents from new entry and expansion by establishing a reputation for price cutting and other predatory and exclusionary actions.

(4). *The potential entrant victim observes the exit or other adverse effect experienced by the predator's existing rival in the demonstration market; and such knowledge is to be presumed if it is commonly known in the industry.*

Managers of local telephone companies actively exchanged information. Indeed, entrant's president took the lead in attempting to establish a regional and national network of independent telephone companies. He was in frequent contact with officers of other independent companies in Wisconsin and throughout the Midwest, exchanging information on the relation between the independents and Bell. Moreover, the rate wars and bitter contests between the independents and Bell were widely reported in the press. Thus, the adverse effects of the price cutting on Bell's existing rivals were widely known within the telephone industry, and the independent rivals easily perceived that Bell's low pricing policy was a principal cause of their plight.[213]

(B) PROBABLE RECOUPMENT

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[212] *See Gabel Ph.D. Dissertation*, *supra* note _ at 154-55, 157-169.
[213] *See id.* at 153-96.

Proof of recoupment requires ex post evidence that the alleged predatory pricing (1) excludes or disciplines rivals or potential rivals, and (2) thereby injures competition and consumers by enabling the predator to raise prices or lower quality, or dangerously threatens to do so. As we have seen, the two effects are related in that the exclusion or disciplining of rivals is the instrumentality by which competition and consumers are harmed.

Exclusionary Effect on Rivals. Bell's below cost pricing excluded its existing rival in Madison and excluded or was capable of excluding future rivals, both in Madison and in other Wisconsin communities. In Madison, sustained below cost pricing, extending over 13 years, prevented Bell's existing rival from raising the necessary capital to expand service and construct a toll network. As a result the rival ultimately sold out to Bell on unfavorable terms, receiving only a fraction of its original investment.[214] The rival's financing difficulties were substantially caused by the low pricing, which drastically reduced the rival's return, allowing only a one percent annual dividend, and blocking additional financing. To be sure, other factors impeded the Madison rival, such as the refusal of the Bell system to interconnect, but almost surely the below cost pricing was a significant and material cause of the Madison rival's exit.

The exclusion of the Madison independent was an intended mechanism to carry out Bell's reputation effect strategy. The Madison independent was a prime predatory target because its president was a leader among independents, not only in Wisconsin but throughout the Midwest and because Madison was the state capital where legislators could observe the benefits of competition first hand. The sustained below cost pricing served as a "dire warning" to potential entrants in other

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[214] *See Gabel & Rosenbaum, supra* note __, at 602.

cities.[215] A later attempt by an independent group to enter Milwaukee failed for inability to obtain financing; and similar effects occurred in other markets.[216] Thus, Bell's intended predatory strategy both excluded its existing rival in Madison and excluded or was capable of excluding potential rivals in Madison and elsewhere.

While the low pricing in Madison was a substantial cause of such reputation effect exclusion, there were other causes as well. These included pressures by Bell on banks and investment bankers to block financing of independents,[217] Bell's purchase of telephone equipment manufacturers who supplied independents, and poor accounting practices by the independents themselves. However, whatever the impact of the other effects, economic studies generally agree that the predatory pricing was a significant cause of the widespread exclusion of the independent telephone companies from Bell's markets.[218]

Injury to Competition and Consumers. Reputation effect predation injures competition and consumers because it raises entry barriers into the recoupment markets and thereby enables higher prices or reduced quality sufficient to enable probable recoupment, or created market conditions that made such effects probable. A striking feature of reputation effect predation is that recoupment occurs, not in the predatory market, at least not right away, but primarily in other markets or in the predatory market at a later time. The Wisconsin Telephone case provides a vivid example. Bell maintained its

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[215] *Gabel Ph.D. Dissertation*, *supra* note at 153-54.

[216] *See Gabel & Rosenbaum*, *supra* note _, at 604.

[217] For example, to impede the financing of entry in Milwaukee Bell induced J.P. Morgan to use its influence to obstruct financing. See *Gabel Ph.D. Dissertation*, *supra* note __, at 248.

[218] *See* David Gabel, *Competition in a Network Industry: The Telephone Industry*, 54 J. ECON. HISTORY 543, 567 (independents in Midwest vanquished by strategic moves "not least of which was predatory pricing"): Kenneth Lipartito, *System Building at the Margin: The Problem of Public Choice in the Telephone Industry*, 49 J. ECON. HISTORY 323 (1989) (AT&T's monopoly stemmed from managerial strategy, compromise with rivals and ability to influence state regulators, not natural monopoly).

low prices in Madison for 13 years before acquiring the entrant's assets, possibly delaying recoupment to the point where it was doubtful that predation could be profitable in Madison itself.[219] Moreover, the advent of state public utility regulation probably limited Bell's ability to raise prices subsequently.[220] Nevertheless, viewed through the lens of a highly plausible theory of reputation effect predation, the evidence strongly points to additional recoupment in other markets, stemming from reputation effects.

The dominating fact is that following the below-cost pricing by Bell in Madison and in other markets, Bell was able to raise prices to a supracompetitive level without inducing significant entry. Evidence that Bell's prices increased to supracompetitive levels appears from the facts that Bell's returns in competitive markets were only a fraction of its returns in monopoly markets. and far exceeded its cost of capital. After the collapse of the independent telephone movement, over the period 1913 to 1935, Bell's cost of capital was between five and six percent, while its average return was 11 percent. In the monopoly markets of Milwaukee, New York and Chicago Bell's returns were, respectively, 10 percent, 14.6 percent and 16 percent.[221] These large discrepancies strongly suggest a monopoly return, especially since following the demise of the independents, the growth rate for new telephones fell from 20.6 percent during the price wars to 5.5 percent, comparable to the growth rate before the independents attempted entry.[222] Further evidence that Bell could maintain substantially

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[219] Bell management estimated losses of between $10,000 and $15,000 per year. The discount at which Bell finally acquire the prey's assets amounted to $62,000, probably not sufficient to overcome these long years of losses. *See Gabel & Rosenbaum, supra* note ___, at 602-03; *Gabel Ph.D. Dissertation, supra* note _ at 154 n.2.

[220] Bell actively sought regulation after passage of the state anti discrimination law for telephone service (*see Gabel & Rosenbaum, supra* note ___ , at 601), perhaps suggesting that Bell's expected return under regulation exceeded its anticipated return under the competition that might be induced if it could not discriminate in local markets.

[221] *See* David Gabel, *Competition in a Network Industry*, *supra* note _, at 567.

[222] *Id.* at 567-68 (1994); *Gabel & Rosenbaum, supra* note __ at 604-05. The survival of the lower cost independents would surely have reduced Bell's profits significantly.

higher prices in its monopoly markets appears from the independents' vigorous lobbying effort in Wisconsin to obtain legislation to limit price discrimination by telephone companies, which Bell vigorously opposed.[223]

Despite the high prices Bell charged in its monopoly markets, there was no waive of new entry into such markets. On the contrary the high growth rate for new telephones during the competitive period when the independents challenged Bell fell back to levels that prevailed before the rise of the independents.[224] Bell regained control of the industry as the independents either sold out to Bell or accepted sublicensing agreements they had previously rejected.[225] While Bell's ability to maintain high prices without attracting new entry rested on more than one factor, predatory pricing was, as we have seen, an important contributing cause.

Thus, the below-cost pricing in Madison and elsewhere established a prima facie case of probable recoupment because (1) the alleged scheme of predation was based on a highly plausible reputation effect strategy and the factual preconditions for such a strategy were present, (2) the predatory scheme excluded or was capable of excluding rivals or potential rivals, and (3) the likely effect was to induce a reputation effect that raised entry and reentry barriers in other local markets, enabling Bell to maintain its monopoly and charge high prices, and thereby injured competition and consumers.[226]

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[223] *See Gabel & Rosenbaum, supra* note___, at 597.

[224] *See* David Gabel, *Competition in a Network Industry*, *supra*, at 567.

[225] *See id.*, *supra*, at 568.

[226] It is occasionally argued that network or other efficiencies in telephone service make monopoly service more efficient. *See* Markus Mobius, Death through Success: The Rise and Fall of Independent Telephony at the Turn of the Century (MIT working paper, Feb. 17, 1999) (*but see* Kenneth Lipartito, *supra* note ___). If so, Bell might have had an efficiencies defense based on lower costs. An alternative output expanding efficiencies explanation might be that under the regime of competition existing in Madison, it is possible that Bell achieved efficiencies warranted by a more extensive infrastructure such that the low pricing in early years was output expanding and in later years not